

SPARE PARTS PROCUREMENT FOR THE DEPARTMENT OF DEFENSE

HEARINGS BEFORE THE COMMITTEE ON ARMED SERVICES UNITED STATES SENATE NINETY-EIGHTH CONGRESS FIRST SESSION

OCTOBER 26-27, 1983

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SPARE PARTS PROCUREMENT FOR THE DEPARTMENT OF DEFENSE

WEDNESDAY, OCTOBER 26, 1983

U.S. SENATE,
COMMITTEE ON ARMED SERVICES,
Washington, D.C.

The committee met in open session, pursuant to notice, at 10:10 a.m., in room SR-222, Russell Senate Office Building, Senator John Tower (chairman) presiding.

Present: Senators Tower, Jepsen, Nunn, Levin, and Bingaman.

Staff present: Alan R. Yuspeh, general counsel; Paul C. Besozzi, minority counsel; Brenda K. Hudson, assistant chief clerk; and Willis D. Smith, deputy staff director and chief scientist for the minority; David S. Lyles and Carl M. Smith, professional staff members; and Tamara L. Farnsworth, staff assistant.

Also present: Dennis P. Sharon, assistant to Senator Goldwater; Guy Copeland, assistant to Senator Warner; Ron Kelly, assistant to Senator Humphrey; Jon Etherton, assistant to Senator Jepsen; Patrick McKim, assistant to Senator Wilson; Mark J. Albrecht, assistant to Senator Wilson; Arnold L. Punaro, assistant to Senator Nunn; James Steinberg, assistant to Senator Kennedy; Ed McGaffigan, assistant to Senator Bingaman; and Ralph White, assistant to Senator Levin.

OPENING STATEMENT BY SENATOR JOHN TOWER, CHAIRMAN

Chairman TOWER. The committee will come to order.

This morning, the committee meets to receive testimony on the issue of spare parts procurement for the Department of Defense. This will be the first of a series of three full committee hearings examining this issue. The second will be held this afternoon and the third is scheduled for tomorrow.

This is an open hearing and I would like to welcome those members of the public who are with us, and on behalf of the committee, I extend a special welcome to the press and media representatives.

While I have occasionally taken issue with some of the treatment given defense issues by the press, I have found the press reporting in this area to be generally responsible and accurate. The press has helped to raise the visibility of the issue and, by so doing, has contributed to finding the solutions.

We are pleased to have the press here with us today.

Before we begin this morning, there are two points which I wish to make.

First, that the discoveries of the familiar "horror story" price increases were made by Department of Defense personnel working within the system. Were it not for their diligence, most of these excessive spare part prices would probably have gone unnoticed.

Second, we should all understand that these problems are not of recent making, but rather are the result of policies and practices which have been followed for decades. However, while it may have taken years to create the environment in which these problems have flourished, I am confident that the solutions will be developed in a far more expedient manner.

These hearings have been structured first to identify the symptoms of the problem, such as the \$1,000 AWACS stool cap and the \$435 hammer.

I might say I looked at a display at Kelley Air Force Base of a number of off-the-shelf items, what the actual cost should have been and what the cost was for the Air Force, and I was appalled.

There were such things as very small screws that the Air Force paid \$3 apiece for, that you can buy off the shelf at 28 cents a hundred. How these things can happen are beyond my comprehension.

We will explore the suggested causes, including insufficient competition, frequent small-quantity purchases, excessive emphasis on expedience and not enough on economy, abuse of technical data rights protection, and lack of value engineering judgment, to name just a few.

We will then learn from the Office of the Secretary of Defense what initiatives have been taken by the Department of Defense to correct these deficiencies; and, finally, we will hear from prominent industry representatives who will provide their assessment of the problem and their recommended solutions.

The schedule for our first three hearings is as follows:

Today, we will hear from the Department of Defense Inspector General's Office and from the General Accounting Office.

This afternoon at 2 p.m., we will hear from the Deputy Secretary of Defense, Hon. Paul Thayer.

Tomorrow morning at 10 a.m., we will hear from the presidents of Pratt & Whitney, and the Hughes Aircraft Corp. We will also hear from the National Tooling and Machining Association and from the president of B. H. Aircraft. B. H. Aircraft has a particularly interesting story to tell which I encourage you not to miss.

Senator Nunn has submitted a prepared statement for the hearing record. Without objection, the statement will be inserted in the record at this point.

[The prepared statement of Senator Sam Nunn follows:]

PREPARED STATEMENT OF SENATOR SAM NUNN

Mr. Chairman, I congratulate you on beginning this series of hearings on spare parts procurement. From my contacts with constituents, there is tremendous concern over the recent horror stories in the press about \$1,118 plastic stool caps and \$436 hammers. The taxpayers are properly demanding that our Defense dollars be spent effectively and efficiently. These hearings are an indication that this committee is committed to this goal.

In my view, the exorbitant price being paid for some spare parts is only one symptom of a much larger problem. For too long, the costs of developing and buying new weapons systems, and of keeping them operational, have increased

without the necessary oversight by the Defense Department. Congress has attempted to inject more attention to these costs by initiatives such as the unit cost amendment which I first introduced in fiscal year 1982.

Unfortunately, the problem is much more complex than the overpricing of a hammer, bolt or diode. The current Defense Department procurement process for both major weapons systems and spare parts is frequently inefficient and often results in cost overruns and weapons that do not operate as expected.

Part of the problem of cost growth stems from overall economic conditions, including inflation and shortages of critical materials. But a major share of the responsibility rests with the major participants in the shaping of Defense policy: the Department of Defense, the defense industry, and the Congress. As these hearings progress, I hope we will hear constructive criticism directed toward the role of each of these participants, including ourselves.

Mr. Chairman, I also hope as these hearings continue, either at the full committee or subcommittee level, that we will have an opportunity to hear from the people in the field—item managers, procurement officers, supply officers—who deal with these problems everyday. It's been my experience that they have a unique and very useful perspective to offer on this subject.

Chairman TOWER. This morning, the committee welcomes Hon. Joseph Sherick, Inspector General of the Department of Defense, and Mr. John Melcher, Assistant Inspector General for Auditing for the Department of Defense.

Gentlemen, we are pleased to have you with us and look forward to your testimony. We will hear from you first and then go to questions and after we have completed the round of questioning, we will entertain the representatives from the General Accounting Office.

Let me yield to Senator Bingaman for any opening comment he might have.

Senator BINGAMAN. I don't have an opening comment, Mr. Chairman. I am looking forward to the testimony.

Chairman TOWER. Mr. Sherick, you may proceed as you see fit.

You do have a prepared statement? If you want to summarize that statement, we will include it in full in the record. You may, however, proceed as you see fit. Then you may call on your associates.

STATEMENT OF HON. JOSEPH H. SHERICK, INSPECTOR GENERAL, DEPARTMENT OF DEFENSE, ACCOMPANIED BY DEREK VANDER SCHAAF, DEPUTY INSPECTOR GENERAL, DEPARTMENT OF DEFENSE; AND JOHN W. MELCHNER, ASSISTANT INSPECTOR GENERAL FOR AUDITING, DEPARTMENT OF DEFENSE

Mr. SHERICK. Thank you, Mr. Chairman.

I am pleased to appear today before the Committee on Armed Services to discuss the procurement of spare parts by the Department of Defense.

I have with me, in addition to John Melchner, Derek Vander Schaaf who is my Deputy Inspector General and who has been overseeing this whole area of spare parts acquisition.

As you said, I have a prepared statement which I would like to put in the record. I have an appendix to my statement that provides examples of some of the spare parts pricing.

Chairman TOWER. We will also include that in the record.

Mr. SHERICK. Mr. Chairman, the Department of Defense procurement of spare parts is a large operation. The Department has over 3½ million items in its inventory, issues about 13 million contract actions

each year, and spends \$13 billion for spare parts. Of this amount, about \$7.6 billion is for major components and \$5.3 billion for minor repair parts.

There are about 30,000 separate aircraft engine spare parts alone. The Department has paid high and, in some cases, exorbitant prices for certain spare parts. You are all aware of the horror stories that you, Mr. Chairman, brought out as well as others such as the 4-cent diode that was sold to the Department for \$110 by a contractor.

These prices, these horror stories, are usually explained away by relating some particular circumstance that made the situation unique. After reading through these explanations, it has been my experience that this is not the answer.

I think these are not just random mistakes that happened because some accounting system went haywire. Over pricing is a series of problems of a systematic nature in the way we buy spare parts.

My report and the reports of other auditors and management in the Department of Defense have been the basis, as you indicated, for much of the media and congressional attention. The Department of Defense is itself uncovering and addressing these problems and we have expanded our efforts in this regard way beyond aircraft engine spares.

The Secretary has addressed the problems, and I think that, generally, good progress is being made and will continue to be made if we give the situation the attention and the priority it deserves.

For my part, I pledge that I will remain heavily involved in identifying and highlighting for correction the spare parts problems across the board in the Defense Department.

In May 1983, we issued two quick reaction reports criticizing the Navy for not obtaining spare parts through the Federal Supply System.

Mr. Chairman, an example of this is where we go out on contracts for training devices, and many of the parts that are in those training devices are common to other items that we have and the parts are already in our supply system.

The claw hammer you talked about is an example. We criticized the Navy for ignoring the supply system and allowing the contractor to buy the parts and apply his overhead cost, profit, and so forth, which in turn resulted in exorbitant prices for readily available items.

On the plus side, as we look at spares and the way we buy them, our audits have not all been negative.

In looking at this problem to see how widespread it was in the Department, we found that the Army and the Air Force were indeed obtaining their items with national stock numbers from the Federal Supply System when it was advantageous to do so.

We also found that the Navy, in another program, used the supply system. So, it was not a prevalent across-the-board problem. We were doing in most cases those kinds of things right.

Let me turn now to some of the causes of the problem as we see them from the audit work we have done to date.

In the past, we haven't made all our procurement and inventory management people sufficiently price-conscious. Priority has been placed on getting the part in the system as quickly as possible. The price of the item was secondary. Certainly, in the interest of readi-

ness, the availability of spare parts is very important, but not at any price.

We also didn't find people determining the criticality of the part. Every part had the same priority. If the requirement came out of an operational unit, a cap for the chair on a navigator's stool got as high a priority as an item that if not provided, airplane couldn't fly.

So, there was no determination of the basic criticality of an individual part. The procurement personnel often go through a mere clerical process, giving little thought to the price comparisons with previous buys or the intrinsic value of the item, or determining what it should cost as opposed to what it does cost and what it did cost the last time we bought it.

For instance, the example you used of the plastic stool cap; the last time it was bought, it was \$969. Looking at the \$969 as opposed to the \$1,100 didn't show a great spread in price, but when you looked at the intrinsic value of the piece of plastic, you know it could not possibly be worth that amount. An Air Force sergeant blew the whistle on that specific item.

In addition, some basic ordering agreements which we were using to buy spare parts allowed the contractor to set or redetermine the price of any item at the time of delivery. This is a no-risk environment that provides little challenge for efficient production or competitive pricing practices.

The contractor, once he gets the order, gets paid whatever the price is when he delivers it. Some supply and procurement officials have been reluctant to seek competition because it is deemed faster, easier, and safer for them to buy an item on a sole source basis.

If you buy a Pratt & Whitney part from Pratt & Whitney for use on a Pratt & Whitney engine, and something goes wrong, Pratt & Whitney will guarantee it.

If you buy the part from somebody else, there is always the possibility that somebody will say, "You shouldn't have bought it from them, they make inferior parts or equipment."

DOD has not made adequate system reviews of contractor operations. We just haven't gone in and looked deeply enough into the way they operate and run their catalog, purchasing, and accounting systems.

We found some items listed four times in contractors' catalogs at four different prices ranging all the way from 67 cents to \$18.

The costs reflected in some contracts included an overhead charge that had been distributed on the basis of formulas. The contractors have engineering costs and other overhead that some of them distribute equally to every line item on the total orders without considering that one line item is 67 cents and another one is \$4,682.

They all get the same shot of overhead because that is the way they distribute the overhead.

Finally, we have found that the true extent to which DOD obtains competition on its spare parts procurement has been obscured. In many cases, the contractor is really only competing with one of his vendors who is not interested in outbidding the basic contractor and making him mad.

We also found competition between the basic vendor and one of his licensees. Again, you have a relationship that is not truly competitive.

There are no easy solutions to these problems. We have to change our attitudes and let both responsible Government officials and contractors know that it is no longer business as usual. This system has to change.

The Secretary of Defense understood the whole acquisition area had problems when he directed the 32 Carlucci initiatives in 1981. When the Secretary of Defense became aware of the problems in the spare parts procurement, he directed me to go into the area of spares and competition.

When he discovered the real depth of the problem, he announced a 10-point program with major changes in the way DOD orders and purchases spare parts. The action he outlined includes establishing incentives to increase competitive bidding and rewarding employees who vigorously pursue cost savings.

One of the items he was concerned about was competition advocates, people out at our buying commands who were concerned with competition and whose duty it is to insure that where competition was possible, we got it.

He also instructed the service Secretaries to take disciplinary action against employees who are derelict in their duty.

In some of the cases we talked about, the contractor came back to the Government officials and said,

Hey you don't want to buy this from me. If you buy it from me, the price is going to be "x", which is thousands of dollars higher than you are going to get it out of your supply system.

The contractors were told, "We don't want to go into the supply system; that is too complicated. You give it to us."

So, the attitude was that it was quicker and easier, to purchase spare parts from the contractor and saving money was not really a major objective.

The Secretary took action to alert defense contractors to the seriousness of the problem and asked them to pursue fair pricing practices and reward or discipline employees where appropriate.

I think Mr. Thayer is going to talk to you this afternoon about what he did along those lines to carry out the Secretary's mandate. He met with many CEO's of defense contractors.

The Secretary directed that we rely on the competition advocate in the services to challenge every order that is not competitively priced or appears to be competitively priced.

But even if the item appears to have been placed in competition, if the unit price is up 100 percent or something like that, the competition advocate is responsible for looking at the item and determining its intrinsic value and seeing if competition is in fact good competition.

The Secretary directed the services not to pay unjustified price increases. His attitude was "We are not going to pay."

Even though the contractors may feel under the provisions of the contract that they are legally right, if they are not morally right, he wants to challenge them on these exorbitant price increases.

He directed that we accelerate the reform on using basic ordering agreements. At the time of our audit, the Navy and the Air Force were using basic ordering agreements, with price redeterminable provisions. The Army never did.

Since that time, both the Navy and the Air Force have stopped using those agreements. That is not to say that we still don't have parts on order under them, but we are not using them for any new orders.

The Secretary directed the service Secretaries to obtain refunds where contractors have overcharged, including suing them, if necessary, to recover unjustifiable payments.

He also directed that when alternative sources of supply are available, cease doing business with the contractors who are guilty of unjustified and excessive pricing and who refuse to refund our order. In effect, he would be suspending them as not good suppliers. My office, of course, is continuing the audit and investigations of spare parts procurement.

The Secretary's action did not stop with the issuance of the 10-point program. On August 18, he directed me to begin a DOD-wide audit of the procurement of all spare parts.

Further, on August 29, the Secretary issued a comprehensive plan for improving management and acquisition of spare parts. The plan directed 17 specific near-term actions to be taken within 90 days, 6 midterm actions to be taken within 180 days, and 2 long-term actions.

He directed that the Defense Council for Integrity and Management Improvement oversee this whole operation, both the short-range and the long-range improvements.

I have to report that the committee is meeting tomorrow to look at the first portion of accomplishment by the military Departments. I happen to be a member of that Council and am very much interested in the reports as they come from the military Departments.

Mr. Chairman, I think you must recognize the procurement problems discussed here represent only a small part of a very large and complex system. Defense procurement regulations and procedures are highly complex and I plan to look into the need for this complexity in my audits of the procurement process itself.

Beyond looking at spares, I am looking at the whole process of the way we buy, not just spare parts, but all items. I believe that the Secretary of Defense has demonstrated that he is serious about reducing the price for spare parts and the actions he has initiated are designed to achieve results.

I plan to continue and expand my efforts to fully support the Secretary in this endeavor.

Mr. Chairman, that concludes my summary remarks. I will be glad to answer any questions you have.

[The statement and appendix submitted by Mr. Sherick follow:]

PREPARED STATEMENT BY JOSEPH H. SHERICK, INSPECTOR GENERAL, DEPARTMENT OF DEFENSE

Mr. Chairman and members of the committee: I am pleased to testify today on the procurement of spare parts by the Department of Defense. DOD procurement of spare parts is a large operation. The Department has about three and one-half million items in its inventory, issues about 13 million contract actions each year and spends billions for spare parts. There are about 30,000 separate aircraft engine spare parts alone. So we are talking about an important aspect of our defense program.

As has been widely reported, the Department has paid high and in some cases exorbitant prices for certain spare parts. You are all aware of the horror stories, such as the diode that costs 4 cents through our supply system but we paid \$110 to a contractor and the switch that should have cost about \$15 but we paid over \$200. They are usually explained away by relating some peculiar circumstances that make that case different. After weeding through those explanations my experiences still tell me that there is no doubt something is wrong here. I do not think these are just random mistakes that occur in any major procurement as

some suppliers would have us believe. Neither are they rampant throughout the system.

The reports bearing on spare parts issued by Defense IG and Service auditors are the basis for much of the attention of the media and of the Congress. The media has not adequately reported that the Department of Defense is itself uncovering and addressing these problems. In fact, improving the procurement process has always been a high priority of this Administration and Secretary Weinberger. I believe good progress has been and will continue to be made.

For my part, I will continue to audit purchases of spare parts. The Inspector General organization and the Military Service audit organizations have been heavily involved in identifying spare parts problems. We have issued 11 audit reports on spare parts over the past two years, have 12 audits in process and plan to begin further follow on audits in the near future. The Military Service audit organizations have issued 25 reports on spare parts, have 36 audits in process and plan to begin nine more audits involving spare parts issues in the near future. The topics generally covered by the audits were:

- Reclamation of spare parts;
- Computation of requirement including initial provisioning requirement;
- Management of inventory and identification of excesses;
- Noncompetitive procurement of spare parts including component breakout program;
- Management of technical data and its use in competition; and
- Procurement of spare parts available in the Federal Supply System and pricing of contracts.

One of my current reports, still in draft, covers aircraft engine spare parts. This is the draft report that received so much recent publicity. Premature release of the draft was unfortunate because it contained some highly summarized data that had not undergone critical review for factual accuracy. After its release we discovered that one table contained errors regarding the extent of the problem. These errors, however, did not negate the existence of the basic problem of unexplainable price increases identified in the report. Also, to the best of our knowledge, the individual examples and all other statistics cited in the rest of the report are accurate.

I think it is clear that DOD has a systemic problem in the way we buy certain spare parts that predates this Administration. I see my job as one of sampling each major area of DOD operations, highlighting the problems if they exist, stimulating corrective actions and moving on to the next area. We have a lot of dedicated hard-working people trying to make our system work. We must do our best to make it workable.

DOD's own audits have identified various situations that contributed to our problem. For example: inadequate technical data that unnecessarily constrains competitive procurement actions; cases where DOD had adequate technical data but failed to seek competitive procurement because it was easier, quicker and less risky to buy sole source; parts bought at high prices from end item manufacturers even though the same parts were available in the Federal Supply System at substantially lower cost; and the "clericalization" of the procurement process. By this last point I mean that buyers were sometimes unable to determine if prices for spare parts were reasonable because they were unfamiliar with the item and couldn't compare price with item complexity.

On the plus side, our audits show that the Department has done many things right. For example, in May 1983, we issued two quick reaction reports criticizing the Navy for not obtaining spare parts through the Federal Supply System. In an attempt to determine how widespread the problem was, we expanded the scope of the audit to include the other Services. We found that the Army and the Air Force were obtaining items with National Stock Numbers through the Federal Supply System when it was advantageous to do so. We also found that the Navy had in fact used the supply system for another of its programs. Additional analyses of two other Navy programs, AV-8B and the Ohio Class Submarine, have been undertaken but not yet finalized.

Let me now turn to some of the causes of the problems. I believe the problems are related to the way the Department conducts its business and to questionable pricing practices by some of our suppliers.

In the past, we have not made all of our procurement and inventory management personnel sufficiently price conscious. Attention has focused on ordering the spares and getting them delivered quickly to maintain readiness without sufficiently considering the reasonableness of cost.

Procurement personnel often go through a clerical process giving little thought

to price comparison with previous buys or the intrinsic value of the item and, therefore, to what the items should cost.

Some basic ordering agreements allow contractors to set or "redetermine" the price at time of delivery, which may be long after an order was placed. This can allow the contractor to negotiate price based on actual cost incurred, thus removing contractor risk and the incentive to control costs in the marketplace. Frequently, the final price is many times greater than the price originally quoted. The Military Departments are no longer using redeterminable basic ordering agreements, but some past orders may be subject to repricing upon delivery. The Defense Logistics Agency has also discontinued ordering spare parts with redeterminable BOA provisions.

Some supply and procurement officials have been reluctant to seek competition because it is deemed faster, easier, and safer for them to buy sole source. Supply and procurement officials often feel comfortable when they buy the spares from the end item manufacturers. If a critical item fails, the end item manufacturer must be at fault. However, if a procurement official decided to obtain the part from some other contractor, his judgment can be questioned.

DOD has not made adequate system reviews of contractors' operations. Far too frequently contractors from whom DOD purchases spare parts do not manufacture the items. Rather, they purchase the item from another company, who may have purchased the items from yet another company and so on. Each contractor adds handling costs, plus overhead and profit to the price.

The cost of parts reflected in some contracts includes overhead charges that have been distributed based on formulas. This practice results in some items being bought for exorbitant costs but the total cost of all items may be reasonable. What often appears as "excessive" cost in a single spare part price is actually a portion of a contractor's expenses for spare parts processing, administration and support functions that has been misallocated. Some contractors' methods for allocating support costs do not take into account the relative value of the item, thus resulting in certain small dollar and small quantity items being charged seemingly large support costs. Much of this problem can be avoided by better contracting procedures such as making engineering and technical services a separate line item in the contract so that these services can be separately evaluated and priced. Thus, when we pay for them we would know what we were getting and what we were paying for them and acknowledging that we needed such support.

Finally, we have found that the true extent to which DOD obtains competition on its spare parts procurements has been obscured. Procurements identified as competitive may not have been competitive because of competition between the prime and his vendor or licensee.

There are no easy solutions to these problems. We have to change attitudes and let both the responsible Government officials and the contractors know that is no longer business as usual.

One of the early priorities of Secretary Weinberger was the examination of the DOD procurement process. This led, in 1981, to the 32 initiatives designed to improve the way the Department does business. When the Secretary became aware of the recent problems in spare parts procurement, he announced a 10-point program with major changes in the way DOD orders and purchases spare parts. The actions he outlined include:

- Establishing incentives to increase competitive bidding and rewarding employees who vigorously pursue cost savings.

- Taking disciplinary action against employees who are derelict in their duties.

- Alerting Defense contractors to the seriousness of the problem and asking them to pursue fair pricing practices and reward or discipline their employees where appropriate.

- Relying upon the competition advocates in the Services to challenge orders that are not competitively placed or appear to be excessively priced.

- Refusing to pay unjustified price increases.

- Accelerating reforms on the use of basic ordering agreements.

- Obtaining refunds where contractors have overcharged including suing the contractor to recover unjustified payments.

- When alternative sources of supply are available, ceasing to do business with contractors who are guilty of unjustified and excessive pricing and who refuse to refund improper charges.

- Continuing audits and investigations of spare parts.

The Secretary's actions did not stop with the issuance of the 10 point program. On August 18, 1983, he directed the Inspector General to begin a DOD-wide audit of the procurement of spare parts. We have started it, and all of the Military

Service audit organizations and the Defense Contract Audit Agency are participating. The objectives of the audit are to quantify the extent that unreasonable prices are being paid, identify the practices that have led to these conditions and determine if further changes in policies and procedures are needed to achieve economical acquisitions. The audit is concentrating on the contractors who provide the largest dollar volume of spare parts to the Department.

On August 29, 1983, the Secretary issued a comprehensive plan for improving the management and acquisition of spare parts. The plan directed 17 specific near term actions to be taken within 90 days, six mid-term actions to be taken within 180 days and two long term actions.

Mr. Chairman, I think we must recognize that the procurement problems discussed today represent only a small part of a very large and complex system. As I stated earlier, DOD processes millions of contractual actions each year, manages millions of line items in its inventory, and spends billions of dollars for spares annually. Defense procurement regulations and procedures are highly complex. We plan to look at the need for this complexity in our audits of the procurement process itself. But for now we must relentlessly correct systemic weaknesses and unnecessary complexity as we identify them in our item audits. We must also identify and place responsibility for lack of appropriate management emphasis on costs.

I believe that the Secretary of Defense has demonstrated that he is serious about reducing the prices for spare parts and the actions he has initiated are designed to achieve results. I plan to continue and expand my efforts to fully support the Secretary.

APPENDIX TO STATEMENT BY JOSEPH H. SHERICK, INSPECTOR GENERAL, DEPARTMENT OF DEFENSE

1. Examples of spare parts or common items with high unit prices:

Item description:	Price paid	Standard or order price
Circuit breaker	\$243.00	¹ \$11.10
Push switch	241.00	¹ 15.41
Semi-conductor device	110.00	¹ 1.04
Resistor	100.00	¹ 1.05
Transistor	75.00	¹ 1.24
Tube	639.29	² 12.00
Hangar	18.57	² 2.41
Case assembly	45,236.16	² 6,445.65
Oil plug scavenge	1,050.31	² 117.05
Connector	143.28	² 13.03
Soldering iron	272.16	² 3.75
Tape measure	427.00	(*)
Hammer	450.00	(*)

¹ Price available in Federal supply system.

² Order price of item.

* We don't have the standard price on these items. However, they are common commercially available tools.

2. Conditions found and specific examples:

Condition: Procurement and inventory management personnel not sufficiently price conscious.

Example: In our Survey of Competition in the Procurement Process at Selected Buying Commands, No. 83-090, March 18, 1983, we found that at the Ships Parts Control Center, Mechanicsburg, Pa., 35 pairs of binoculars were purchased sole-source at a total cost of \$19,000 because the item was coded sole source . . . The buyer stated that procurement method codes were rarely challenged because . . . challenges would be time-consuming. Sole-source procurement was also easier, faster and safer for procurement personnel. The binoculars were off-the-shelf items which we felt should not cost more than \$100 each.

Condition: Clericalization of the procurement process.

Example: In our (Draft) Audit of the Procurement of Aircraft Engine Spare Parts, Project 3AP-021, June 10, 1983, we found that at the Oklahoma City Air Logistics Center (ALC) prior to November 1981, one person (GS-7) mechanically processed all purchase orders placed with Pratt and Whitney. Purchase orders are still handled by only 1 buyer, GS-7, and 2 clerks, GS-5/4. Purchasing personnel were not required to question cost growth.

Condition: Redeterminable Basic Ordering Agreements.

Example: In our (Draft) Audit of the Procurement of Aircraft Engine Spare Parts, June 10, 1983, we found that the use of price redeterminable BOAs allowed the contractor to raise prices without contracting officers either monitoring unit price increases or questioning significant cost growth. In a sample of 357 items, we found that 27 percent were bought using fixed price redeterminable BOAs.

Condition: Reluctance to seek competition.

Example: In our Survey of Competition in the Procurement Process at Selected Buying Commands, No. 83-090, March 18, 1983, we found that at the Ships Parts Control Center, Mechanicsburg, the buyer stated that sole-source was safer because it provided the identical item the user was replacing. Sole-source procurement was also easier, faster and safer for procurement personnel. The several weeks needed to advertise were eliminated. Workload was reduced for procurement personnel.

Condition: Inadequate system review of contractor's operations.

Example: In our (Draft) Audit of the Procurement of Aircraft Engine Spare Parts, June 10, 1983, we found that aircraft engine spare parts purchased from Pratt and Whitney had been bought from a vendor and had markup factors applied to arrive at unit prices charged the Government. Determination of the suitability of the contract price to the Government, according to DAR 3-801.2, always remains the responsibility of the contracting officer. This was not being done, however.

Condition: Procurements identified as competitive may not have been competitive.

Example: In our (Draft) Audit of Procurement of Aircraft Engine Spare Parts, June 10, 1983, we found that DAR 3-807.7 on adequate price competition was being disregarded by three procurement offices: the San Antonio ALC, Oklahoma City ALC and the Aviation Supply Office. The DAR states that price competition should not be considered adequate if the lowest final price is not reasonable. We found examples of the lowest price quoted being 100 percent more than the previous price paid in a recent period. However, if at least two bids were received, a buy was considered competitive regardless of price quoted.

Condition: Overhead charges distributed based on formulas.

Example: This frequently is the reason used by contractors for the high prices of spare parts. The Navy determined that a contractor appeared to be overcharging for various parts and handtools by allocating support costs without taking into account the relative value of the items. We reviewed price proposals in this case and determined that excessive prices for items were partially the result of such distribution of overhead. Even if the overhead charges were reasonable in total, distributing them equally to each part purchased distorts the cost of the individual parts and makes comparisons of parts cost difficult.

Chairman TOWER. Thank you, Mr. Sherick.

Does either of your associates wish to make any remarks?

Mr. MELCHNER. No, Mr. Chairman.

Mr. VANDER SCHAAF. No, Mr. Chairman.

Chairman TOWER. But they will be available for response to questions?

Mr. SHERICK. Yes, sir.

Chairman TOWER. Mr. Sherick, in your written statement, you advised that the DOD IG draft report on spare parts contains certain statistical errors.

Since that report received widespread publicity, would you be kind enough to address the specific charge in that report which was in error, and have the correct figures been determined?

Mr. SHERICK. Yes, sir.

First of all, as I stated, the draft report was leaked. It was unfortunate because this one table which had been prepared on the basis of information and computer listings that we had received from the military Departments was in gross error.

The error involved was in the quantification of the increases in spare parts pricing. We looked at what we called the high-low mix; in other words, we looked at the lowest price and the highest price a part had

been purchased for in a 3-year period and then computed the percentage of increase.

Unfortunately, the data was faulty and it indicated some 60-plus percent of the items were priced at higher than 50-percent increases. As we redid the table, it indicates that about 16.3 percent of the items had increases between the high and the low prices of 50 or more percent over that period.

Now, we have been very, very conservative in our correction in that we didn't look at the intrinsic value of any item. We just looked at the price we really paid. We still think that inflation during that period ran anywhere between 21 and 30 percent for the full 3-year period, and we looked at items where the price increase was 50 or more percent and that were purchased less than 3 years apart.

We have corrected the table and it will be part of our final report.

Chairman TOWER. Will you provide that correction for the record?

Mr. SHERICK. Yes, sir.

[The information follows:]

COST GROWTH OF AIRCRAFT ENGINE SPARE PARTS

CALENDAR YEARS 1980-1982

LINE ITEMS OF ENGINE SPARE PARTS

	<u>San Antonio Air Logistics Center</u>	<u>Oklahoma City Air Logistics Center</u>	<u>Aviation Supply Office</u>	<u>Total</u>	<u>Percentage of Total</u>
Total Line Items on Record	10,051	9,110	7,990	27,151	
Less: Line Items With Only One Price on Record	<u>3,452</u>	<u>3,684</u>	<u>4,226</u>	<u>11,362</u>	
Line Items to Account For	<u>6,599</u>	<u>5,426</u>	<u>3,764</u>	<u>15,789</u>	100.0
<u>Percentage Range *</u>					
Price Decrease	1,855	1,983	1,027	4,865	30.8
No Change	813	487	666	1,966	12.4
1-49	2,865	1,952	1,571	6,388	40.5
50-99	714	576	295	1,585	10.0
100-199	220	271	108	599	3.8
200-299	69	69	40	178	1.1
300-399	18	35	11	64	.4
400-499	11	18	10	39	.3
Over 500	<u>34</u>	<u>35</u>	<u>36</u>	<u>105</u>	.7
Line Items Accounted For	<u>6,599</u>	<u>5,426</u>	<u>3,764</u>	<u>15,789</u>	100.0

* Based on a comparison of the highest with the lowest transaction in the 3 year period. If the 2nd transaction was lowest, item is a price decrease. If 2nd transaction is highest, item is a price increase.

Chairman TOWER. Mr. Sherick, you have indicated yourself that you have been in contact with whistleblowers and it is my understanding they have been productive sources of information for the IG's Office.

Is it your perception that the Department is actively discouraging contacts of this sort?

Mr. SHERICK. On the contrary. For instance, one of the ways we have whistleblowers contact us is the hotline.

Since May 1981, we have expanded the publicity, and the capability of our hotline. When we took the hotline, prior to Secretary Weinberger's tenure, we used to get from 20 to 30 calls a month. He put out a letter to all DOD personnel. We put out posters. The DOD hotline is advertised on the back of all our phone books.

We have publicized the hotline in a number of ways. During October, we had over 600 calls and letters. About 25 percent of those calls are what we consider valuable in terms that require follow-on.

We have a policy of protecting the identity of anyone who calls and I think we have been successful in doing that.

As can be seen, there has been a tremendous increase in the use of the hotline and it has been very, very helpful.

Chairman TOWER. The Department has actively encouraged whistleblowing?

Mr. SHERICK. Yes, sir.

In fact, we put out another letter by the Secretary last month encouraging all our people and employees to use the hotline.

Chairman TOWER. Mr. Sherick, it has been suggested that by asserting the claim to proprietary data rights, the manufacturers have successfully prevented the Government from breaking out many spare parts for competition.

Of course, in many cases, the claim of proprietary data rights is justified. However, in other cases, such as older engines like the J-57 and J-52, it appears such claim is inappropriate.

Have you found any evidence to support the claim that the protection granted by claim for proprietary rights has been abused?

Mr. SHERICK. In our aircraft engine audit, we didn't find any evidence.

We found a lot of complaints by management and management officials that this was one of the things that the aircraft manufacturers and engine manufacturers did.

The proprietary rights issue is an issue that needs some real research and exploration on just what is protected, how long it lasts and how effective it is in really protecting proprietary rights.

It is possible either John or Derek may have more information on that.

Chairman TOWER. I would invite any additional comments.

Mr. VANDER SCHAAF. The only comment I can make is to emphasize what Mr. Sherick said.

You can look at copyrights. We have laws and regulations. They have been applied in the courts. The legal background is fairly clear. The same thing is true for patents. When it comes to this business of proprietary rights, it is much more difficult to deal with. A clear legal case history is not there.

In a lot of the service buying activities, they have to take a tougher stand on this and they have to go out and challenge some of these

claims and if they end up in court, so be it. We intend to get some decision on what a proprietary right is and when it ends.

Mr. MELCHNER. Also we are finding that the technical data that we do buy that is not protected by any proprietary rights or patents is not adequately being used.

So, we are pushing hard to use what we already have without any strings attached to it.

Chairman TOWER. Mr. Sherick, in your report, you state two of the primary reasons for major cost increases in spare parts were, first, lack of in-depth review of price quotations and, second, lack of concern with unit price increases.

Any number of factors, such as inadequate planning, deficient supervision, underemphasis on economy, and inadequate data processing equipment, may account for these conditions.

On the basis of your audit, to what do you attribute these conditions?

Mr. SHERICK. There is no question in my mind that manning is the problem. In the last 10 to 15 years, we have reduced manning very appreciably in these areas and we have clericalized a lot of this process.

The other area is priority. If the requirement comes in from an operational unit, it gets the priority and the gold stars are given for being responsive to those kinds of requisitions. Gold stars are not given for holding up a procurement and saying, "Hey, do we really want to spend this amount of money for this item? Is there something else we can do? If we wait awhile, can we get competition?"

I think the manning problem is a problem that we have throughout our whole logistics area, not just in the acquisition of spare parts, but also in our supply operations and the way we manage our inventories.

In many cases, as you are aware, the inventory management problem is a more basic problem than even this because we have items in inventory, but we don't know where they are. We are working at the problem and we have made a lot of progress in that area, especially the Navy.

I think that the major issue here is manning and the way we use our people.

For instance, I think it was at Oklahoma City when they decided to go off the basic ordering agreement. Where they had one GS-7 running the whole process, they had to put nine people in that operation to be able to apply the human touch to look at the prices as they come in and when they were exorbitant, to go in and look at the item and decide is that what they wanted to spend.

You can see in that illustration the increase in people was ninefold. If you are going to reverse the clericalization, it is going to take money.

Chairman TOWER. The point made in the IG draft is that a majority of our spare parts is being procured on a sole-source basis.

What percentage of DOD's spare parts is procured on a sole-source basis and what evidence do you have to support the suggestion that increased competition will reduce the price?

Mr. SHERICK. We only looked at the engine spares, but looking at the statistics for all spares, about 60 to 70 percent are bought sole source.

Mr. VANDER SCHAAF. For aircraft engine spares, we estimate something like 90 percent or more are bought sole source.

We will provide more accurate figures for the record.

[The information follows:]

NONCOMPETITIVE PROCUREMENT

We contacted representatives of major buying organizations involved in the acquisition of spare parts. As a result we obtained the following statistics for fiscal year 1982 showing that the extent of competition varied by organization:

	Percent of noncompetitive procurement fiscal year 1982	
	Dollar value	Individual actions
Army:		
DARCOM (overall total).....	54	39
AMCCOM	59	10
AVARDCOM	76	67
CECOM	50	52
MERADCOM	73	89
MICOM	88	38
TACOM	41	9
TSARCOM	65	74
Navy:		
ASO	93	78
SPCC	73	67
Air Force:		
San Antonio ALC.....	89	82
Oklahoma City ALC.....	91	68
Sacramento ALC	73	73
DLA (overall total).....		
DLA (overall total).....	33	39
DSCS	30	29
DESC	48	54
DGSC	31	53
DISC	21	35

Mr. VANDER SCHAAF. Mr. Sherick is correct; about 70 percent of the total 3 million spares out there are bought on a sole-source basis.

Mr. SHERICK. One problem we have when you look at competition is that, as I mentioned earlier, we find competition between the contractor and his vendor or his licensee or you find a lot of surplus dealers in this business that are not necessarily involved in true competition. They have a windfall because they happened to buy some manufacturer's surplus production and have held onto it.

That does not necessarily mean that competition is out there continuously. Once he sells those parts, the competition disappears. But we are, I think, with the competition advocates, driving the number of sole-source purchases down and, hopefully, we will do it as we use more of the technical data we have.

Mr. VANDER SCHAAF. On the second question, how do we know that competition saves money? The IG for DOD has not done any work in that area yet. However, the General Accounting Office has repeatedly issued reports in which they indicate that we save generally between 20 and 25 percent on an item when we get real, honest-to-goodness competition.

That is where we make these estimates that we can save money with competition. There are many major end items where you have only one source. Once we go through the R&D and the appropriation process and win a contract for the F-15 or F-16, for example, we can't switch contractors and compete. It is not feasible to do so.

Follow-on buys of those items perhaps should be thrown out in measuring whether we have competition or not. But some of the subsystems that make up that F-15 or F-16 can be competed.

You could say an airplane is nothing but 2,500 spare parts flying in formation, and a lot of those spare parts can be made by someone else other than the vendor of the airplane.

Mr. MELCHNER. The Air Force provided two examples that illustrate the benefits of competition.

When we bought a shroud assembly, we bought three of them in 1981 and paid about \$19,000. We bought another batch of 14 in 1982 and we paid about \$14,800. In 1983 the Air Force went competitive to small business and bought two of the items and paid about \$11,400.

There was a price decrease of 42 percent between the purchases if you compare the first and the last.

Similarly they took a board assembly which we bought in 1981 for \$30,800 and made two successive purchases in 1983, again from small business, at \$12,600 and \$9,800. The opportunities are there.

That is what we hope to achieve by pressing the competition advocate program and pressing both our Government employees and the contractors to use these breakout programs where they make sense, where there are opportunities for competition.

Mr. VANDER SCHAAF. Mr. Chairman, you are going to hear from the B. H. Aircraft Co. in the series of hearings you mentioned. They can give you two examples of where they came in on a competitive basis and while they did not end up with the contract in one example, they drove the price down very significantly.

They saved the Government, by just bidding in the process, tens of millions of dollars for just two small spare parts.

Chairman TOWER. Senator Bingaman?

Senator BINGAMAN. Thank you, Mr. Chairman.

Let me ask about some of these 10 points that Secretary Weinberger has in his July 25 memorandum indicating what would be done to deal with the spare parts problem. Let me start with the last one.

He said in this summary I have here that the corporations which have dealt with the Government fairly and openly should not be maligned because of the failures of the few.

I gather the implication here is that this problem is centered in a few contractors. Do you agree with that implication?

Mr. SHERICK. As I said, when we looked at the items we found that there were certain lead contractors who were very much involved. Only now are we doing a DOD across-the-board audit.

Yes, when you look at the parts, as I said, 16 percent of them went up over 50 percent. That meant 84 percent of the prices stayed relatively firm.

Senator BINGAMAN. You say that is centered in a few contractors; is that right?

Mr. SHERICK. In engine spares it was.

Senator BINGAMAN. Could you tell us which contractors it was centered in?

Mr. SHERICK. Certainly Pratt & Whitney was a big one.

Mr. VANDER SCHAAF. I would prefer not to get into the contractors by name. We have to look at it in more depth.

We have 200 contractors now selected. We have randomly sampled items the Government buys from these 200 contractors.

We are going to start a price analysis of those items. If we find one that looks bad, then we will look at all items purchased on that order to make a determination.

I would prefer not to name further contractors. Part of the problem is that in the engine business there is a narrow field of suppliers in the first place, so you don't have a good across-the-board competitive situation.

As we said before, when you don't have good competition, it can more easily lead to these price abuses.

Mr. SHERICK. In our draft audit report we named the contractors.

Senator BINGAMAN. If it is true, as the Secretary says here, that the problem involves the failures of a few and that the vast majority of contractors are not involved in this kind of overpricing? When will we be able to get some kind of indication as to which group is overcharging consistently and which are scott-free?

Mr. SHERICK. As I told you, we have a DOD-wide audit underway now. We are looking at some 202 contractors. That final audit should be issued about February and we will be determining the extent that these contractors are charging us unreasonable prices.

Senator BINGAMAN. Let me ask about some of the other items in Secretary Weinberger's memo.

You stop me when I run out of time, Mr. Chairman.

Chairman TOWER. Go ahead.

Senator BINGAMAN. The first suggestion the Secretary lists, at least No. 1 on this list, is that we are going to reward employees who vigorously pursue cost savings.

Do we give bonuses, promotions?

Mr. SHERICK. Already in the Air Force I think the sergeant that reported the cap was given an award of over \$1,000.

The colonel at Oklahoma City who reported the Pratt & Whitney overcharges was given a \$10,000 cash award.

In our system, especially with our civil servants, bonuses are a very appropriate part of the program.

Senator BINGAMAN. Could we get a list of the people who have received bonuses and what they received them for in the 3 months since this memorandum came out?

Mr. SHERICK. Yes.

[The information follows:]

AWARDS LIST

In the three months since Mr. Weinberger's memorandum was issued, the following individuals have received cash awards. These awards were given as appreciation for initiatives in challenging unit pricing or efforts to secure competitive bidding on spare parts. These efforts have resulted in excess of \$9 million in savings to the Government.

Chief of Naval Material Command:

Ned Shaw	\$2,500
Mark Opilla	1,000
Irene Yusowski	1,000
Robert Gibbon	750
Michael Sprowles	150

Air Force:

SSgt Michael J. Nance.....	4,452
MSgt LeRoy P. Tafaya.....	2,783
SSgt Paul D. Stone.....	2,702
SSgt Winifred M. Griego.....	1,806
Walter R. Cooke, Jr.....	1,391
SSgt Joe E. Randle.....	1,178
SSgt Charles R. Kessler, Jr.....	1,166
SRA Gregory S. Stier.....	1,132
SRA Gregory S. Stier.....	1,014
AIC Loss D. Stewart.....	870
MSgt Walter W. Polk.....	815
MSgt Robert E. Burford.....	750
SSgt Bruce L. Tesch.....	517
Curtiss W. Gaddy.....	495
SSgt Michael J. Nance.....	365
Billy R. Hartsough.....	220
MSgt James Treadwell.....	143
David R. MacFarlane.....	175

An additional 57 awards totaling \$15,227 were given to Air Force personnel; however, narrative information was not captured by the Air Force.

Defense Logistics Agency:

Gerald D. Mignano.....	\$400
Emily A. Todd.....	250
Henry B. Webb, Jr.....	200
Richard M. Newbert.....	200

The following 28 DLA employees have received bonuses of \$100:

Russell H. Van Allen, Angela M. Bogucki, Betty Y. Elam, Algie W. Frittro, George A. Griffith, Charles E. Jennings, Carolyn S. Jones, Lynn C. McCormick, and Samuel E. Bland.

Llinwood Conti, Jr., Robert E. Farris, Herbert F. Garrett, Angeline P. Harrison, Nancy M. Jimison, James H. Lee, Constance T. McNeill, Steven D. Montgomery, and Suzanne M. Miller.

Lila M. Morris, William R. Rivard, Callie F. Shannon, Mary L. Studevant, Robert F. Warren, Edward G. West, Melvin E. Reames, Laura M. Shelton, Sarah C. Spain, and James H. Wilcox, Jr.

Mr. SHERICK. In addition to that, for instance, we are considering a lot of people right now.

One of them recently is an individual in DLA who called our attention to the Davey Compressor overcharging. As I mentioned earlier, the contractor paid fines and penalties to the Government of \$3 million.

Senator BINGAMAN. The Secretary says he wants to take disciplinary action where employees have been negligent in implementing these procedures.

Mr. SHERICK. Yes.

Senator BINGAMAN. Have there been examples of that?

Mr. SHERICK. He relieved people at Orlando in the naval training center with disciplinary action taken, as far as I understand.

Senator BINGAMAN. For the record, since we have had about 3 months under this July 25 memorandum, I would be interested in seeing what has been done in each of these areas.

Mr. SHERICK. Mr. Thayer will be talking to you about that.

Senator BINGAMAN. Then I will ask him.

Chairman TOWER. I might advise the committee we will have Paul Thayer here this afternoon and some of these questions should be referred to him.

Senator BINGAMAN. Perhaps you will have the same response, but another thing he recommends is to take steps to obtain refunds where there have been overcharges. I think you mentioned possible lawsuits.

I wonder if any suits have been filed?

Mr. SHERICK. I think the Navy got back payments from Sperry, Gould and the Air Force from other contractors just on the basis of "This is an overcharge and we want the money back."

Senator BINGAMAN. But no suits?

Mr. SHERICK. I don't know of any suits. Of course, we had a fraud involvement with Davey Compressor. That was a fraud case. We did get a civil penalty recovery there.

Senator BINGAMAN. Is there a problem in small businesses qualifying to be authorized suppliers of these parts? Is that one of the reasons we don't have competition, that it is very difficult for some of the small suppliers to get into the game?

Mr. SHERICK. I think it is difficult from a facility point of view, although many of these people who do supply us as vendors and subcontractors are small machine shops. A lot of these items lend themselves to being produced by small businesses.

The problem for them has been to get certified as qualified producers. I think B&H Aircraft will discuss this problem with you.

Yes; we find that is a problem.

Senator BINGAMAN. You think the hurdles that a person has to jump in order to get certified could be substantially reduced?

Mr. SHERICK. I think they could be; yes.

Senator BINGAMAN. One of the other things that the Secretary said he was interested in doing is ceasing doing business with those contractors guilty of unjustified excessive pricing.

Have we ceased doing business with anybody, to your knowledge?

Mr. SHERICK. That is suspending them. I don't have any examples of how we have done that.

Mr. VANDER SCHAAF. Since the IG came into existence, we have had a large increase in the number of suspensions of contractors, not necessarily all for spare parts overcharging, but DLA suspended 111 contractors this year.

I don't have the figures with me for the military Departments, but we will put those in the record for you.

They are also up considerably over what they were in previous years. [The information follows:]

SUSPENSIONS AND DEBARMENTS

These figures below represent combined suspensions and debarments resulting from all sources. The figures are given on a calendar year basis.

	1980	1981	1982	¹ 1983
Army	12	72	72	49
Navy	19	6	30	63
Air Force	7	20	22	47
DLA	34	49	55	111
Total	72	147	179	270

¹ Calendar year-to-date figures.

Mr. MELCHNER. Around 78 in the last 6 months.

Senator BINGAMAN. When you suspend a contractor under that arrangement, what does it mean?

Mr. SHERICK. It means he is someone we don't want to do business with and we will not deal with him in terms of accepting his offer or placing contracts.

Senator BINGAMAN. For what period is that?

Mr. SHERICK. I think it is anywhere from 6 months to 3 years. Of course, there is due process. The contractor can come back. There is a formal process for suspending and debarring.

Senator BINGAMAN. Can you suspend without a hearing?

Mr. SHERICK. I think we can suspend without a hearing, but we can't debar without a hearing.

Mr. VANDER SCHAAF. There is a legal decision before the courts right now on the matter of whether due process is going to require a hearing on the suspension portion also.

Senator BINGAMAN. What is debarring as distinct from suspension? The person can't sell parts to the Government for 3 years?

Mr. SHERICK. Debarring means we just don't want to deal with them.

Senator BINGAMAN. From now on?

Mr. SHERICK. For a period of up to 3 years.

Senator BINGAMAN. So, it is permanent?

Mr. SHERICK. Often, it is the end of the company. I don't have that much experience to date, but where we find people have been doing illegal or unethical things, we think suspension or debarment is a very important tool of the Department.

We should not be doing business with people who are cheating us. I find as I go around and talk to legal groups and contractor groups that they would prefer to plead guilty to fraud anytime than to be debarred or suspended because as a company they look to that as almost a death sentence, especially if a major portion of their production goes to the Department of Defense.

Senator BINGAMAN. Thank you, Mr. Chairman.

Thank you, Mr. Sherick.

Chairman TOWER. Senator Nunn?

Senator NUNN. Mr. Chairman, I want to try to catch up. I regret I couldn't be here when the hearing started. I am reading the testimony now. I will just ask one or two questions.

I have heard from the field, Mr. Sherick, that the number of people out there handling spare parts at the lower level has grown almost none in the last 3 or 4 years, yet the spare parts items, numbers and dollars, have grown enormously.

I don't suggest we don't have enough people in the Department of Defense.

Chairman TOWER. You are trying to get them cut down.

Senator NUNN. We try to shift around where they are. We get an overload in Texas occasionally.

[Laughter.]

Senator NUNN. I do think someone needs to take a look at whether there are enough people in the procurement spare parts area to handle the huge increase in volume.

Have you looked at that?

Mr. SHERICK. It is one of the things we are auditing. We did an audit looking at some of the contracting officers, for instance.

This is John Melchner, my Assistant IG for Audits.

Mr. MELCHNER. We are trying to get some statistics that plot the number of people involved in the procurement process against the number of contractual actions and dollar value being spent.

There does seem to be a separation between the number of people involved in the process and the dollars and contractual actions.

The problem is that we are not sure exactly where the difference is. We don't know whether they are counting headquarters personnel, whether they are counting people in warehouses. We are not really sure of the data we have, so we have not reached a conclusion.

Senator NUNN. This does not tell us the whole picture by any means. This may be an isolated example, I don't know, but the staffing of the procurement directorate of the Air Logistics Center in my State that has been dealing directly with this increased 3 percent since the 1980 fiscal year. However, the dollars they have obligated has increased almost 80 percent. That needs to be looked into further.

I do believe we need to take a look. The Department of Defense has increased overall by 60,000 people in 3 years. It would be interesting to see how many of these people are really going into the management of these hundreds of thousands of spare parts.

Mr. SHERICK. In my position as Director, Program and Budget, we put about 11,000 people into the 1981 budget as an increase in the whole logistics areas because of the way the defense budget was changing.

We were emphasizing modernization and increased readiness. Our procurement dollars were going from 30 percent up to 57 percent of the budget. Whether those people ever trickled down or not, I don't know. It is a big Department and the increases come in at the top and they keep moving down through a lot of intermediate headquarters.

These people are at the bottom of the pile. Generally we want to track those people down to see if they ever arrived. I doubt it.

Looking at what we saw in Oklahoma City, we didn't see any big increases in people down there that would tell you that people were applying their assets that way.

Senator NUNN. When you read in the paper up here that there is some spare part that has been purchased at 1,000 percent over cost, how could anybody be so dumb to do that?

When you look at the system and you see the guy ordering it, they have a number out of 10,000 different items, they have no idea when the number comes what they are buying, whether it is a hammer, engine, or what, the mind boggles with the numbers of these parts.

You have to ask yourself where is the accountability point, where in the system is he supposed to look at a hammer and say this is a hammer instead of No. 10,222?

Mr. SHERICK. Hopefully as a result of some of the corrective actions that Congress has proposed, when increases over a certain percentage take place, somebody will look at them.

Senator NUNN. At what levels is that supposed to be done and where is that accountability?

Mr. SHERICK. It has to be done at the buying activity. That is where the competition advocate should be. That is the kind of thing he ought to be doing.

Senator NUNN. That is where we need to focus our attention. It seems to me they should not be sitting down there with the individual looking at computer readout and looking at the requisition number and buying such and such a number. He never sees the parts.

It goes directly to the user. The user never sees the price.

It seems to me there is a separation of responsibility here that there is almost no accountability in terms of someone actually looking at the item and looking at the cost which is what the news reporters do when they report it. They are looking at the end product and looking at the cost and saying it is horrible.

That is what we are doing as Senators and Congressmen. Who else in the system in the bureaucracy does that?

Mr. SHERICK. The auditors do it, but then it is too late.

Senator NUNN. The auditors do it, right. You are looking at it as we are and the news reporters do it, right. You are looking at it as we are and the news reporters, and so forth, but anybody out there in the bureaucracy actually is seeing a screwdriver and here is \$1,000 we paid for it and the two don't match up.

Mr. VANDER SCHAAF. The Air Force put in a program called zero overpricing. It went into effect 3 years ago. It did not have emphasis behind it in the beginning, but now it does.

As part of this program as they move out from the buying activity, from the manufacturers, when they deliver an item to the bases where eventually a mechanic takes the item from the shelf, he gets a price on the item and can challenge that price under this zero pricing.

Senator NUNN. Who is he?

Mr. VANDER SCHAAF. The mechanic or worker on the flight line, the user. The user has to be able to look at the part and get some idea of how the price compares with other similar parts he installed in the airplane.

Senator NUNN. You mean the guy who actually started the order and said we are missing this part and we need it?

Mr. VANDER SCHAAF. He is part of the chain. That is a supply clerk or logistics official at the base level.

Senator NUNN. He is getting the dollar amount when he gets the part back now?

Mr. VANDER SCHAAF. Yes, generally, but not always, depending on how the stock funds operate in the military command. The Air Force stock fund goes down to base level and he can check the price in that way.

The Army stock fund does not operate that way. He just gets the item delivered and probably does not get the price. I will check for the record to find out. That is the way the situation used to be.

[The information follows:]

REVIEW OF SPARE PARTS PRICING

Until recently no one in the procurement chain was systematically observing the item and measuring it to the reasonableness of the cost. The advent of the Competition Advocate (CA) program has the potential to remedy that situation. We understand that part of the CA responsibilities will be to research individual items and determine their value in relation to the price being charged by the contractor. This information is then supplied to individual buyers for use in negotiating contractual prices. We are concerned, however, that only the Air Force CAs will be independent of procurement and logistics functions assigned full time to their job, and report directly to the Commanding Officer of the

activity. In the Army, the Deputy Commander at each buying activity has been designated as CA, but that is in addition to all his other duties. The Navy is similarly assigning this function to individuals at its buying centers who already have other important assignments. The Defense Logistics Agency CA is reporting to the Chief of Procurement, which could impact on the independence of the CA function.

Contract pricing proposals (DD Form 633) used on negotiated contracts also provides the buyer a vehicle to review contractor submitted pricing proposals of estimated or incurred cost by contract line item. However, the cost breakdown may not be in sufficient detail to analyze individual spare parts unit costs.

Stock funding does provide a means of potentially informing the customer (the mechanic or crew chief) what an item cost. In the Air Force, a consumable item that goes to an Air Force Base continues to be owned by the issuing Stock Fund entity. When the base supply activity then issues the item to the customer organization, the customer's funds are charged. The Accounting and Finance Office records the charge but the actual user may or may not see the cost of the item. If the item is repairable, it never enters the Air Force stock fund. The logistics center buys it with procurement funds and issues it to the using base activity without reimbursement.

The Army is somewhat the same except that two stock funds are involved. When the Army's wholesale system ships a consumable item to an Army installation, the item is "sold" from the wholesale stock fund to the retail stock fund. In the Navy, all ships' components, both consumable and repairable items, are managed by the stock fund. The Navy will soon bring aircraft repairable components into the stock fund as well. The Army and Air Force currently do not plan to bring their repairable items into their stock funds.

The Air Force-wide zero price program was instituted in March 1979 to encourage Air Force personnel to identify and report goods and services suspected of being unreasonably priced. For spare parts, the program prints the item's price on the supply paperwork when the item is withdrawn from the warehouse so that personnel receiving the item can compare it with the price and report obvious overpricing. Through this program it was an Air Force crew chief that identified the much publicized overpriced plastic cap for the E-3A navigator's seat which the Defense Logistics Agency purchased for the Air Force. In fiscal year 1982, 1,093 items were verified as overpriced by the Air Force.

Senator NUNN. Thank you very much.

Chairman TOWER. Senator Levin?

Senator LEVIN. Thank you, Mr. Chairman.

A few weeks ago we read that an Ohio firm, Davey Compressor Co., pleaded guilty to fraud against the Air Force. This is the case that you mentioned in response to Senator Bingaman's question.

About a week after that we read in another newspaper that the Air Force agreed to resume buying equipment from the Davey Co., the same company that pled guilty the week before for overbilling the Government of \$1.7 million for spare parts.

Are you familiar with what is going on?

Mr. SHERICK. Yes. We were very upset by the indication that the suspension may be lifted. I think Derek Vander Schaaf can talk on this.

Mr. VANDER SCHAAF. I looked into it when I heard that they would be reinstated. It happened the same day that we received notice that the company would plead guilty. I was assured by the Air Force General Counsel's Office that reinstatement was part of the agreement with the Department of Justice to get the guilty plea and that there have been some other changes in the company.

Senator LEVIN. What was part of the agreement?

Mr. VANDER SCHAAF. That they would not go the next step from suspension to debar Davey Compressor. They would put the contractor back on the authorized vendor list.

Senator LEVIN. Part of the deal of the guilty plea was that they would be reinstated?

Mr. VANDER SCHAAF. That is right.

Also that the individual, I forget his exact title, but——

Senator LEVIN. His name was Falso.

Mr. VANDER SCHAAF. He resigned and left the firm, I understand. I don't know how correct it is, but there is some reorganization that might take place within that firm in the relatively near future.

We in the IG business have not been privy to that information. We are not in the business of prosecuting and looking for the punishment. We are just trying to provide those people with the facts.

Mr. SHERICK. We are very much interested in that and we are going to look into it.

Senator LEVIN. This is not the first time where one of the services has agreed to continue to do business with a company who cheated us as part of a bargaining session.

Mr. VANDER SCHAAF. You have a lot of air compressors standing out there on the flight lines needed to start airplanes and for other purposes. This company has got the spare parts and drawings to keep that machinery running.

It takes time to bring somebody else in to make those parts. The Air Force was between the rock and the hard place on that.

Senator LEVIN. They did not have to agree in the plea bargaining to do it. The necessity of getting compressors required them to do it by themselves.

Mr. VANDER SCHAAF. They probably felt they didn't lose anything by that agreement because they knew they would have to go back and reorganize the company to keep it in business because the Air Force needed parts.

Senator LEVIN. That is the only company manufacturing the compressor?

Mr. VANDER SCHAAF. They are not the only company.

Senator LEVIN. Will you let us know the results of that investigation?

Mr. SHERICK. Yes.

[The information follows:]

SUSPENSION OF DAVEY COMPRESSOR CO.

The Davey Compressor Company was suspended by the United States Air Force on June 22, 1983. This suspension was based on adequate evidence that Davey had been deliberately providing inaccurate price support documentation to the Government in order to obtain higher prices when negotiating provisioning orders for replacement parts. The suspension was based upon an affidavit by an Administrative Contracting Officer for a Defense Logistics Agency office in Dayton, Ohio. Based on this individual's earlier findings, the Defense Criminal Investigative Service and the FBI had undertaken an investigation of the acts of wrongdoing. At the time the Air Force suspended Davey, a Federal grand jury was also investigating the matter, but no indictments had been returned.

Our procurement regulations require that suspension be imposed only in the public interest and to protect the Government's interests, but not for the purpose of punishment. These regulations allow the Air Force to modify or terminate a suspension if the contractor eliminates the causes for the suspension.

Shortly after the suspension was imposed, Davey approached the Air Force Debarment and Suspension Review Board and admitted that wrongdoing had occurred, but alleged that all the wrongdoing had been committed by just one corporate official. Davey requested that the suspension be terminated, and

indicated a willingness to fire the alleged wrongdoer, make restitution, and take steps to preclude any recurrence of wrongdoing.

The Air Force refused to terminate Davey's suspension unless it consented to resolve all criminal and civil actions together. On October 7, 1983, the Air Force agreed to terminate the suspension only after Davey agreed to take the following steps:

1. Davey entered into a plea agreement with the Department of Justice in which Davey pleaded guilty to 25 counts of filing false claims and paid \$250,000 in fines;

2. Davey consented to a judgment by which Davey paid restitution of \$2,750,000;

3. In the Plea Agreement and Judgment, Davey agreed to establish certain new audit and accounting procedures suggested by the Defense Contract Audit Agency to preclude a recurrence of wrongdoing; and

4. Davey agreed to permanently sever from employment the alleged wrongdoer, Mr. John Falso, who has since been sentenced to a jail term.

It was also agreed that violation of any of the terms of the Plea Agreement or Judgment would constitute a criminal act by Davey. Furthermore, the Air Force has reserved the right to review the matter if Davey, or any successor, ever fails to abide by the terms of the Plea Agreement and Judgment.

The Air Force terminated Davey's suspension only after receiving restitution and securing assurances that the Government's interests would be protected both now and in the future. Additionally, the Air Force determined that because of the comprehensive nature of the Plea Agreement, Judgment, and further assurances secured from Davey, and because of the specialized nature of the products provided by Davey to the Department of Defense, that the best interests of the Government were served by terminating Davey's suspension.

Senator LEVIN. Mr. Sherick, as a result of one of your audits we took some action in Congress and I want to express my thanks to you for that.

One of your audits, looking at the horrendous amount of money that we are paying for spare parts, suggested that we reestablish cost as a primary concern of procurement activity by requiring the contracting officers to certify that the price of an item is fair and reasonable and the price has not increased by 25 percent or more in a 12-month period.

As I am sure you know, I offered an amendment on the Senate floor. Senator Tower and Senator Cohen helped us and we ended up with that amendment based on that recommendation, not precisely in those words, but telling the Department, in essence, to come up with regulations that would establish a ceiling for an annual increase that could be tolerated without a certification by the contracting officer in the file that it is a necessity.

Are you familiar with that amendment?

Mr. SHERICK. Yes, sir.

Senator LEVIN. Have you been consulted by the DOD on the implementation of that amendment?

Mr. SHERICK. We know who will implement it. They are very familiar with our audit report. We have given them our ideas on the way we think it should be implemented.

Senator LEVIN. You have?

Mr. SHERICK. Yes, as a buying activity.

Senator LEVIN. You have made special recommendations?

Mr. SHERICK. I think our audit report made recommendations on what the percentage should be.

Senator LEVIN. Following the audit report we adopted an amendment which is part of the law.

Mr. SHERICK. Yes.

Senator LEVIN. After the amendment became law, did you submit any additional information to them?

Mr. SHERICK. I don't think so.

Senator LEVIN. Is it your plan to do that or will you rest on that one paragraph?

Mr. SHERICK. We are looking at the law. We will be very much interested in the way it is implemented.

Senator LEVIN. Will you send us copies of any written recommendations that you make to them on implementation of that amendment?

Mr. SHERICK. Yes.

Senator LEVIN. There was a chart which appeared in an audit, your well-known audit on parts for the Air Force, which created some controversy.

Are you familiar with the chart I am talking about?

Mr. SHERICK. Yes, sir, I am very familiar.

Senator LEVIN. You have not gotten a final report yet?

Mr. SHERICK. No. The final report has not been issued, but we think we have pretty much the final numbers for that table. The chairman has asked that that be made part of the record.

Senator LEVIN. Thank you. I appreciate the chairman's doing that.

If I have misstated my argument based on the chart, I would want to correct it.

Would the chart in modified form be part of the final report?

Mr. SHERICK. Yes, sir.

Senator LEVIN. When can we expect that report?

Mr. MELCHNER. Sometime during the month of November.

Senator LEVIN. Mr. Vander Schaaf, this question I think should be addressed to you.

We have found that a significant number of spare parts that were bought from a contractor were in turn purchased by that contractor and without any change being made, any value added to them, we are paying a significantly larger amount for those parts, in many cases an outrageously larger amount.

What do you call that process? Pass along, or how would you address it.

Mr. VANDER SCHAAF. We call them pass-through charges.

Senator LEVIN. Do you have any idea in what percentage of the spare parts that we purchase there is simply a passthrough without any value being added by the person from whom we purchase it?

Mr. VANDER SCHAAF. The question of any value bothers me. They may have some value. They may open it and inspect it or repack it or do something else with it. That may add some value. You are right, there is no engineering work or there is no further manufacturing work done to those parts.

I have been told in the aircraft spares area by one manufacturer that it is his subcontractor who makes 75 percent or 80 percent of his parts and they are passed through. There may be an inspection process or a repackaging process.

Chairman TOWER. If you will yield, the question is sometimes a very slight amount of value is added, but a great deal higher price.

I mentioned Kelly Air Force base where they found all of these things themselves. that there was an instance where they were paying \$3 for a screw that cost 28 cents a hundred. They put a dab of gray paint on the end of each one.

I think that is an example of where there is only a small or slight modification and yet we are still paying the increased price.

Senator LEVIN. Can you give us some idea of the spare parts purchase?

Mr. VANDER SCHAAF. \$13 billion in 1982. Probably \$15 billion in 1984 in spare parts.

Senator LEVIN. Let me say it has been a subject of real outrage in the country for us to continue to pay these prices. A number of initiatives have been made to try to correct the problem.

Could you give us an estimate of that \$13 billion, what percentage of that \$13 billion comes to us without any change from the contractor to speak of?

I am not talking about inspection. That contractor has to take that part out of the box and look at it. I am not talking about that. That is a useful function.

I am talking about any add-on you would consider to be of value, repacking in different boxes, inspecting each part, taking it out of the box and putting it in, sure, if that has to be done, we have to pay for it.

Mr. VANDER SCHAAF. I have no way of determining that.

Mr. SHERICK. Let me have a war counsel on that to see if we can come up with an answer.

[The information follows:]

"PASS THROUGH" CHARGES

We determined that this type of information is not available. However, on an example basis, Oklahoma City Air Logistics Center personnel estimated that 80 percent of spare parts ordered from Pratt and Whitney Aircraft were made by a manufacturer other than Pratt and Whitney. Illustrations of this "pass through" are attached.

In another example, we performed a recent audit of a Navy activity that was buying initial spare parts that were available in the supply system from the prime contractor, Sperry Corporation. The audit showed that one parts list procured from Sperry contained 483 items, but Sperry was the manufacturer on only 5 of these items. The remainder was obtained from source manufacturers and "passed through" to the Government.

There are a number of other examples that could be used. Passing products through a chain of vendors is standard business practice particularly when dealing with spare part type items.

SCHEDULE OF SELECTED PRATT & WHITNEY PARTS PURCHASED FROM SOURCE MANUFACTURERS SHOWING 1980 AND 1981 PRICES

Stock No. and nomenclature	1980 selling price	1981 selling price	Computation of 1981 selling price		
			Cost to P&W	Markup factor	Selling price
2840-00-009-4300RU: Case assembly	\$1,759	\$30,223	\$20,250	1.492505	\$30,223
2840-00-413-0809PQ: Support assembly	8,453	30,772	20,460	1.492505	30,772
2995-00-241-2212RU: Assembly housing	454	2,058	1,560	1.319053	2,058
2915-00-015-6063RD: Assembly housing	374	2,239	1,500	1.492505	2,239

Source: Air Force Plant Representative Office (detachment 5, East Hartford, Conn.) Report on Spare Parts Pricing, Dec. 3, 1982.

Mr. SHERICK. I would say this: One of the things that the contractors will tell you, and you will have them here and you are going to talk to them, they take the position "When you buy it from us, we stand behind it and if you buy it from Charlie's Machine Shop, all you have is

Charlie's Machine Shop behind it, if there is a problem with it, for instance, if that part breaks and that ruins the engine or something like that."

So, there is a certain amount of guarantee, if you will, that comes with the part.

Senator LEVIN. That is why they all support the warranty program?

Mr. SHERICK. They don't.

Senator LEVIN. Before I leave I want to thank the chairman for convening these hearings. I think this initiation is a very important one. I am glad that the Chair as usual takes these initiatives to keep us involved in this critical area.

Chairman TOWER. Thank you, Senator.

I have some questions I want to ask you, but we do want to hear from GAO. I will submit my additional questions for the record.

If any of my colleagues have additional questions, they may submit them for the record. We will hold the record open until the close of business today for further questions.

Mr. Sherick and gentlemen, thank you very much. We appreciate your testimony.

Mr. SHERICK. Thank you, Mr. Chairman.

Chairman TOWER. We will hear next from representatives of the General Accounting Office who at the request of the committee have conducted a survey of the automatic data processing equipment used by various procurement agencies.

There are literally hundreds of thousands of spare parts procured here at a cost of several billion dollars. It is clear those charged with the responsibility of acquisition and management can accomplish this task only with the aid of very sophisticated automatic data processing equipment.

Manpower is limited, therefore, to computer assistance essentially. To determine whether or not the equipment available to the various procurement agencies is adequate and being properly used, the committee requested GAO to conduct a review of that equipment.

To present the reports of that study are Mr. Warren Reed, Director of the Information, Management and Technology Division; Mr. Tony M. Csicseri, Group Director; and Mr. David Dore, Project Manager.

Gentlemen, you may proceed as you see fit.

Mr. Reed, do you want to make your presentation? You may do so and your colleagues may supplement it or be available for responses to questions.

Anything you want to submit for the record may be incorporated in the record in full and you may summarize.

STATEMENT OF WARREN G. REED, DIRECTOR, INFORMATION MANAGEMENT AND TECHNOLOGY DIVISION, GENERAL ACCOUNTING OFFICE, ACCOMPANIED BY ANTHONY M. CSICSERI, GROUP DIRECTOR, GENERAL ACCOUNTING OFFICE; AND DAVID A. DORE, PROJECT MANAGER, GENERAL ACCOUNTING OFFICE

Mr. REED. Thank you very much, Mr. Chairman.

I would like to summarize my written statement.

As you can see, I would also like to use some visual aids as I go through my remarks.

Chairman TOWER. Those are always very helpful to us.
Mr. REED. I hope so. Thank you.

As you indicated, you asked us specifically to take a closer look at the use of computers to support the spare parts business.

GAO ASSESSMENT

Computers are or soon will be technologically current.

Computer software, except for Army, are outdated.

Computer-based information is limited.

Computer capabilities to identify and prevent unwarranted price increases range from limited to none.

The essence of my message is indicated on this first slide, Mr. Chairman. I will amplify on this message through the remainder of my remarks.

I would like to point out that the two bottom assessments have to do with the computer information itself and the first two are related to the computer hardware and the computer software being used.

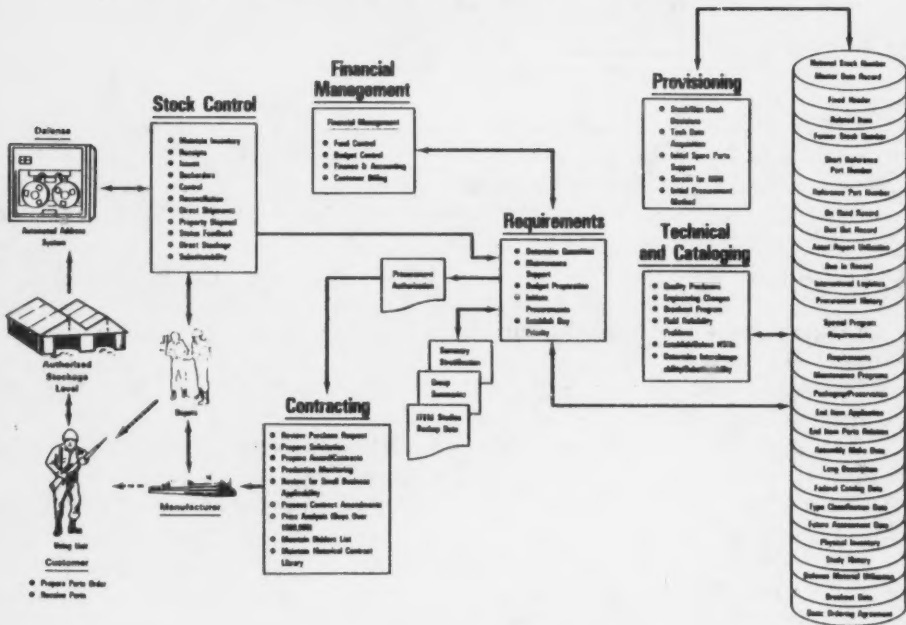
What we are indicating there is that the computer hardware at the facilities we visited, is or will be in pretty good shape.

On the question of computer software, we believe it is technologically outdated.

I would like to stress that because of time constraints, we are not making specific recommendations. However, I will offer for consideration improvements that can be made. I will discuss these later.

Now, before I amplify on the essential findings that I showed to you, I would like to briefly explain how our work fits into the overall logistics process.

WHOLESALE LOGISTICS FUNCTIONS



The main point I would like to make is that there is a variety of management functions associated with the logistics process. These are indicated in bold print and they are amplified and explained in my written statement.

Most of these functions are supported by computers, and we found the amount of support varies by military department and agencies.

Second, I would like to make it clear that our effort, in response to your request, focused on a subset of this overall process, namely, the contracting process.

COMPUTER EQUIPMENT

Defense Activity	Type	Date Installed	Remarks
Navy's Aviation Supply Office	Univac 404 (4)	1968-81	• Computer Parts No Longer Made by Univac. • Maintenance Being Withdrawn by Univac. • New Computer Contract to be Awarded in January 1984 with First Delivery Scheduled April 1984.
	Univac Spectra 7045 (2)	1979-81	
	Burroughs 4800 (2)	1979-81	
Army's Troop Support and Aviation Materiel Readiness Command	IBM 4341 - M2	5/80	• IBM 4341 Upgraded to M2 in 1982.
	IBM 4341 - M2	2/81	
	NAS AS-5-3	8/80	
	NAS AS-5-3	10/80	
Air Force's San Antonio Air Logistics Center	PKE 3242	5/81	• Major Computer Replacement Program Planned.
	CDC Cyber 170/730	5/82	
Defense Logistics Industrial Supply Center	NAS AS 3060	3/83	• Defense Logistics Has a Major Computer Replacement Program in Process.
	IPL 4446	7/82	
	IPL 4446	8/82	

Now, I would like to address some of your specific questions and I will first go into the state of affairs of the computer equipment and I will use this slide here to make my essential point.

Down on the left of the chart you will see the specific facilities that you asked us to investigate or review.

The facilities are the Navy Aviation Supply Office, the Army's Troop Support Aviation Materiel Readiness Command, the Air Force Logistics Center at San Antonio, and the Defense Industrial Supply Center in Philadelphia.

Across the top we indicate pertinent characteristics of the computer equipment. The basic message that should be drawn from this chart is that the Navy's equipment is the oldest, but it is scheduled to be replaced at the earliest date; namely, April 1984.

The Army's computers were installed in 1980 and 1981 and upgraded in 1982.

The Air Force and Defense Logistics Agency computers were installed most recently as interim upgrades until ongoing plans for computer replacement are accomplished.

The bottom line of this chart is that the computers being used are or will be technologically current or up to date.

COMPUTER SOFTWARE

Defense Activity	System Name	Processing Techniques	Age of Software	Comments
Navy's Aviation Supply Office	Uniform Inventory Control Point System Collection of Independent Systems	• Batch/Serial Tape Processing • Limited Disk • Limited Random Inquiry	Mid 1960's	• Extension Tape to Tape Processing Required to Update Files and Get Output. • Software to be Redesigned by 1989.
Army's Troop Support and Aviation Material Readiness Command	Commodity Command Standard System Integrated System	• Batch/On-Line • Disk Oriented • Random Inquiry	Early 1970's	• No Major Redesign Planned. • Expanding Automated Contract Preparation.
Air Force's San Antonio Air Logistics Command	USAF Logistics Management System Collection of Independent Systems	• Batch/Serial Tape Processing • Punch Card to Tape to Computer • Cycle Update/Serial Dependent - Output Tapes Remotely Processed and Mailed Back.	Early 1960's to Early 1970's	• Software Improvement Plan Exists.
Defense Logistics Agency Defense Industrial Supply Center	Standards & Automated Material Management System Integrated System	• Batch Update • Disk Oriented • Random Inquiry	Early 1970's	• Equipment Being Replaced and Software Redesigned. • DLA is Moving Toward a Paperless Office System.

Turning to the computer software situation, depicted on this next slide, we show across the top pertinent characteristics about the software, such as its processing techniques, its age, et cetera.

In the area of computer software we believe the age and effectiveness of the software is logically and technically outdated and that improvement can and should be made.

The Army's software is the most current and there are no major redesign plans in process. Software redesign plans are in process for the Navy, Air Force, and the Defense Logistics Agency.

Chairman TOWER. So, you believe the Army's hardware and software both are up to speed now?

Mr. REED. The hardware, yes. But I will have to give you a mild disclaimer on our assessment of the software and the plans that exist for upgrading this software. We did not have time to review in detail the merits of the current software or new software that the different agencies are going after. So, we are not exactly sure. We know the Army's software has been upgraded recently but we are reluctant to say that the software is up to par as it should be for the requirements that we see needing support.

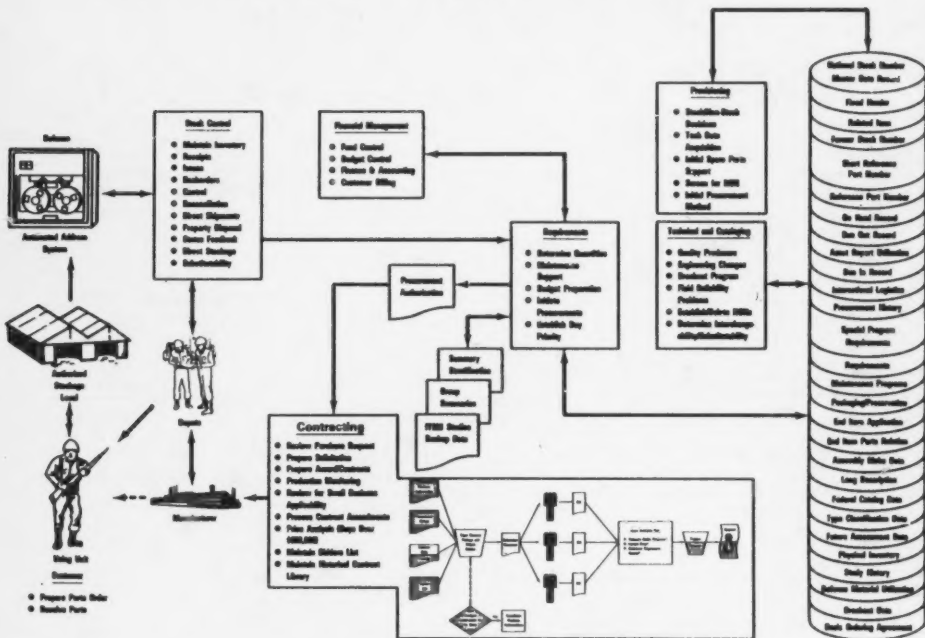
To reinforce what I said, the bottom line of the computer software story is that the existing software, the software they have now, with the possible exception of the Army, we believe is outdated.

I would like to now focus on your other areas of concern; that is, how is computer information being used to support the procurement process and specifically its use in the area of the spare parts price determination.

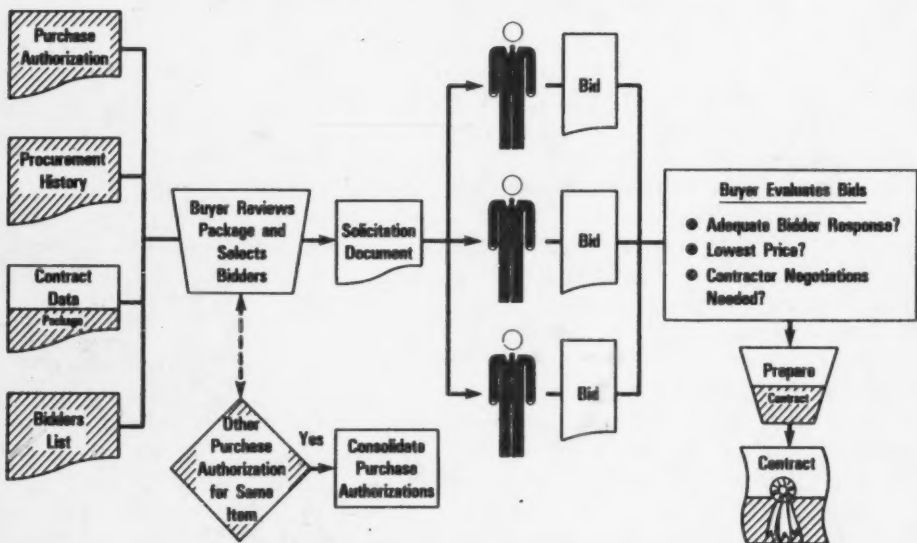
I would like to use the next slide just to make the point that the areas that my remarks will be focusing on is the contracting process.

The next slide shows the basic functions performed by the buyer and the information available, both automated and manual. The process begins on the left and moves to the right.

WHOLESALE LOGISTICS FUNCTIONS



CONTRACTING FUNCTIONS



The shaded areas represent computer-generated input to the buyer and unshaded areas indicate manual support.

Note that this process is for competitive procurements, but it also has relevance to sole-source procurements which were discussed by the previous witness.

The buyer has two major decision points. The first includes reviewing the document shown on the left here, such as using the procurement authorization, procurement history data and selecting contractors who will be asked to make a bid. This area currently makes use of computers.

The second decision involves evaluating bids or proposals received against particular criteria and selecting a winning contractor. Note that this area is largely a manual process with the exception that computers are sometimes used to prepare actual contracts as shown on the lower right.

I would like to amplify on the actual computer support where automation is indicated on this chart; that is, the far left and the lower far right.

Most of the facilities we reviewed use a computer to support all the functions on the left side of the slide. For example, the computer supports the purchase authorization for providing the buyer notice and authority to initiate procurement.

The computer also provides procurement history data such as prior contract awarded, et cetera. Next, the computer is used to provide buyers with a prospective bidders list. This capability is only used when pre-established dollar thresholds are exceeded. These thresholds vary by service and agency.

All services used the computer to generate contractual instruments shown on the right.

Currently, though not explicitly indicated on this chart, the use of computers to identify spare parts price variances is very limited.

Only the Defense Logistics Agency has such a capability, but it limits this to purchases that are less than \$1,000. The Army is the only service we found planning to develop such a capability.

DLA's PRICE VARIANCE REPORT

MOTHERHOOD, APPLE PIE AND COMPETITION					SAVE WITH COMPETITIVE BIDDING					
PF-108	DISC	PSZ	PART 1	VENDOR PRICE VARIANCE REPORT				AS OF 11 SEP 83 PAGE 00007		
50% AND 00035 VALUE USED FOR PRICE COMPARISON										
VENDOR CODE	BPA/OTC	CALL NR	PR NUMBER	U1	QTY	VENDOR PRICE	TOTAL PRICE	SHR DATE	BASE PRICE	NSN/PART NUMBER
85527	DLA500K3AAB040158	YPK3212000051	EA	5	7.8500	38.25	09/09/83	.71000	5365005981127	

I would like to show you an actual printout of a price variance report on the next slide.

This slide is an example of DLA's price variance report, as I indicated. To show you how the various reports can be used, note that the report shows that the current vendor price paid for the item was \$7.65 versus a base price of \$0.71 which was the lowest price paid for the item during the last 12 months.

This is more than a 10-fold increase and greatly exceeds the 50-percent management criteria used at the Defense Industrial Supply Center.

This particular item relates to a retainer ring similar to a washer. We are showing you the price variance report simply to emphasize

how the computer can assist management by flagging unusual price increases.

I have just quickly summarized the existing and planned capability for computer information support to the procurement process. I hope you have noted that automated support to the contracting process is limited.

Also, we have provided exhibits of actual computer output in our written statement that might raise questions about the adequacy of the existing computer support.

To reinforce this point, I would like to go over quickly two recent spare parts procurements that could have been executed more effectively if more automated information had been available or the buyer had made better use of available information.

My first example is an Army procurement of a frame assembly. The same part was being procured by two different buyers at the same time.

Both procurements were started in May 1983 within 8 days of one another. The main point of my example is the procurement authorization document pointed out that the first procurement was still in process, but neither buyer made any effort to coordinate and consolidate the two buys.

Both buyers were on the same four-person buying team and sat within 30 feet of one another.

Senator NUNN. Excuse me right there, Mr. Reed.

Is there anything that should signal those two buyers that they are buying the same kind of equipment?

Mr. REED. Yes, sir. The computer produces this information. The question is whether the buyer is using the information provided by the computer.

Senator NUNN. So there is some signal that says the buyer should be alerted that another buy is coming?

Mr. REED. That is correct. The computer provides information that tells the buyer another procurement is in process for the same item.

Shall I continue?

Senator NUNN. Yes; proceed.

Mr. REED. Another point I would like to make is neither buyer was provided or requested a bidder's list and both used personally maintained information to identify the contractors asked to bid. Each buyer ended up with different contractors and prices of \$139.60 and \$410, a difference of \$270.40.

As an aside, I would like to point out that one of the contractors canvassed by the two buyers was the same. Interestingly enough, this contractor proposed different prices to each buyer. For unexplained reasons, for a quantity of six the price was \$410 and for 20 the price was \$435.

Senator NUNN. The contractor did not do anything wrong, I guess, if you believe in competition. They could submit any bid they wanted to.

This is strictly a Governmental error; is that right?

Mr. REED. Yes, sir. But my point is for a larger quantity, the contractor proposed higher unit prices.

Senator NUNN. This is totally a Government error, this is not a contractor error. If you got a competitive bid, the contractor could come back and charge \$10 for a 10-cent item and be within all his legal rights?

Mr. REED. That is right.

Senator NUNN. Legally they are within their rights; is that correct?

Mr. REED. That is correct. A contractor can bid any price but the Government does not have to make an award if the price is too high.

Senator NUNN. In this example when the defense points the finger at the contractor and says, "That is your fault," it is misleading in terms of buying?

Mr. REED. I would think so. Since the two aforementioned contracts were awarded by the same contracting officer, on the same date, and for unit prices that differed by \$270.

The Army has no price variance reporting capability today to identify these types of price differences, but we do understand that it is developing such a reporting capability.

Our next example is the procurement by the Air Force of a door seal retainer for the C-5 aircraft. Again the computer showed that another purchase request for the same item was in process.

The first buyer was specifically identified. When the second buyer received the proposed price of \$188 per unit and compared it to the \$130 cost listed on the procurement history document for an earlier procurement, the buyer questioned the contractor about the new higher price. The buyer was told it was an extrusion product that had to have holes drilled in it.

Therefore, with only limited data to question the price the buyer accepted the contractor's certification of data in support of the proposed price breakdown. The points of this example are that this spare part was bought on a sole-source basis and the technical drawings are proprietary, therefore, competition was precluded.

Two procurements were in process at the same time for the same item and were not coordinated or consolidated. The first buyer's contract for a quantity of 22 was awarded at a unit price of \$77.67.

The second buyer's contract for a quantity of 19 was awarded at a unit price of \$188.06.

The buyers had no idea that what was being bought was a standard strip of aluminum alloy 14 inches long. I think you can see this from the actual part.

Air Force technical engineers have examined this part and concluded that it can be fabricated at a unit cost of \$6.81 when 25 are made and \$4.62 for 400, a big difference from the \$188 actually charged by the contractor.

Senator NUNN. What went wrong here? Whose fault was this, in your opinion. I am not talking about names.

Was this a misleading by the contractor, was it negligence by the Government, or was it both?

Mr. REED. I think both. Specifically, the first thing that went wrong is that there were two procurements in process and the buys should have been coordinated to make sure they didn't end up with two different contracts for the same part.

The second thing that went wrong is that the buyer should have had more information provided. For example, what is the intrinsic value of this part? That would help when the buyer goes back and queries the contractor for reasons why the cost is so high. Also the buyer would have a basis for comparing or evaluating the contractor's feed-back on the cost.

As you will see in a moment, I will be suggesting that the computer can be used to help provide this kind of information for the buyer.

There is a sequel to this example, by the way. The Air Force queried the contractor about the high price. On October 10, 1983, the contractor responded to the Air Force, and acknowledged that the price was on the high side and agreed to reduce the price from \$188 and some cents down to \$33. More detail on this is in my written statement.

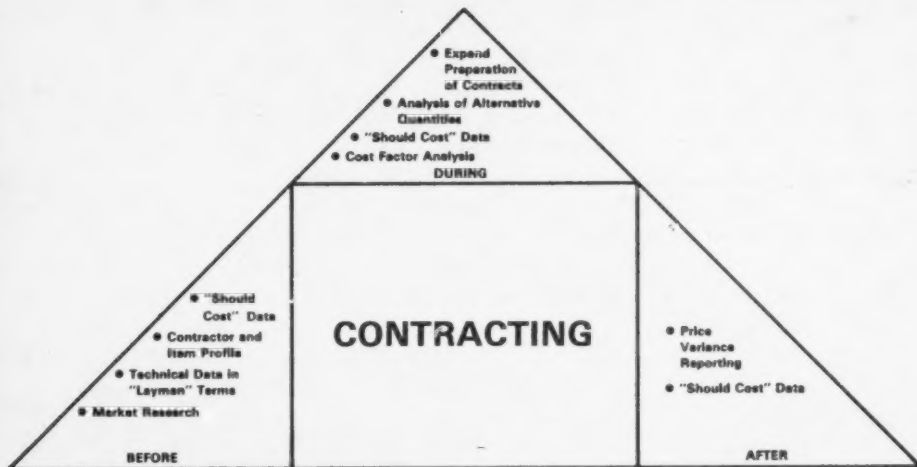
As you recall, based on what Air Force engineers have said, one would conclude that the new price is still on the high side.

I would like to emphasize these are examples of what we observed and are not intended to indicate widespread problems.

The points of the examples are, in some cases, computer information is available and is not used. In others, computer information is not available and could be used.

Now I would like to touch on areas for consideration where computer information could enhance the procurement process. To put this discussion into context, I would like to refer you to this next slide.

PROPOSED AREAS FOR AUTOMATION



This slide summarizes our suggested areas for increased attention. Note the "before" phase on the left. It relates to buyer activities before selection of the contractor.

Shown in the center is the "during" phase. This relates to evaluating the contractor proposal. On the right is the "after" phase. This relates to buyer activities after the contract is awarded.

What we are suggesting is more use of the computer in each of these different phases of the contractual process.

Recall that the "before" phase is the area that currently receives some automated support. We suggest increasing the use and reliance on computers for selecting prospective bidders and assisting the buyer to make a more informed judgment on proposals.

The principal enhancement in this area includes computer provided descriptive information of the item being procured, its technical characteristics, the intrinsic value of the part, what it should cost, and contractor profile information. Also increased use of computers in market research to help identify additional sources of supply is a possibility.

The "during" phase relates to evaluating contractor proposals and selecting a contractor. This phase currently receives the least computer support and perhaps offers the greatest potential computerized analytical support.

For example, to enhance the buyer's ability to evaluate a contractor's proposed cost factor analysis, the Navy has developed a computerized mathematical model to analyze contractor proposed cost changes such as new labor rates, overhead, and so forth.

Before this model was developed it took Navy buyers 3 or 4 hours to manually determine the bottom line effect of any contractor proposed change. Now, using the computer, the buyer can get the results in a matter of minutes. This computer model shows promise.

Also in the "during" phase, the computer could be used for analysis of economies of scale. We believe the Government should encourage contractors to offer alternative quantities. Current contracting provisions permit the Government to do this and, therefore, we should exploit it to the fullest. More detail on this is at page 16 of my written testimony.

In the third phase of the contracting process, "after" the computer could provide automated support for analyzing price variances. As I mentioned earlier, computer-based price variance reporting is limited to the Defense Logistics Agency, for purchases less than \$1,000. The Army is now developing a price variance reporting capability.

We believe price variance analysis and reporting should be the norm rather than the exception.

We also believe all services should have such a computer-based capability.

Although we show price variance in the third phase of the contracting process; that is, after the contract is awarded, its primary relevance should be in the "during" phase; that is, when the contractor's proposal is being evaluated. This usage could alert contracting officers that there is a price variance that needs justification before a contract is signed.

This concludes my remarks on our suggested areas for consideration for enhanced computer support. I would like to now summarize.

You asked us to look at the computer equipment and software that supports procurement activities and to focus our work on computer-generated information being used to identify unwarranted price increases.

GAO ASSESSMENT

Computers are or soon will be technologically current.

Computer software, except for Army, are outdated.

Computer-based information is limited.

Computer capabilities to identify and prevent unwarranted price increases range from limited to none.

The GAO assessment is on this next slide. We also discussed the services' efforts to improve procurement of spare parts and identified areas where we believe increased automation support could help the buyer in the "before," "during" and "after" phases of the contracting process.

We believe these computer-based changes can increase the buyers' productivity, expand spare parts competition and identify unwarranted price increases. To the extent that our considerations are not already a part of the software improvements planned by the services we believe they should be included in their plans.

I would like to again say that the area we looked at to respond to your request is but a small segment of the overall logistics process. Many of these functions can and undoubtedly do also affect pricing.

Although we believe the computer offers many opportunities for making significant improvements, even the most modern computers and software cannot compensate for ineffective buyer practices, as our two examples have indicated.

Contracting officers and buyers are oriented to support of military requirements; that is, they have a strong mission focus, as indicated by the previous witness, and are not necessarily sensitized to producing economies.

We endorse a strong mission focus, but we also believe pricing reviews should be given strong emphasis and I don't think anyone will argue with that.

This concludes my testimony and I am ready to answer any questions you might have.

[The prepared statement of Mr. Reed follows:]

PREPARED STATEMENT OF WARREN G. REED, DIRECTOR, INFORMATION MANAGEMENT AND TECHNOLOGY DIVISION, U.S. GENERAL ACCOUNTING OFFICE

Mr. Chairman and members of the committee: We are pleased to be here today at your hearing on the Department of Defense's spare parts procurement practices. In an August 8, 1983, letter to us, you expressed concern that the Defense Department may not be realizing the full benefit of modern computer capabilities to manage the procurement process. You asked us to look at the computer equipment and software that support procurement activities used in purchasing aircraft spare parts. You also asked that we focus work on computer generated information being used to identify unwarranted spare parts price increases.

We performed our work at the locations you identified—the Air Force's San Antonio Air Logistics Center in Texas, the Navy's Aviation Supply Office and the Defense Industrial Supply Center, both in Philadelphia, and the Army's Aviation Materiel Readiness Command in St. Louis. At these locations, we interviewed officials working in procurement and data automation and reviewed various contract files and planned improvements in automation. We also interviewed officials on the various Defense Department task forces investigating spare parts pricing and procurement problems.

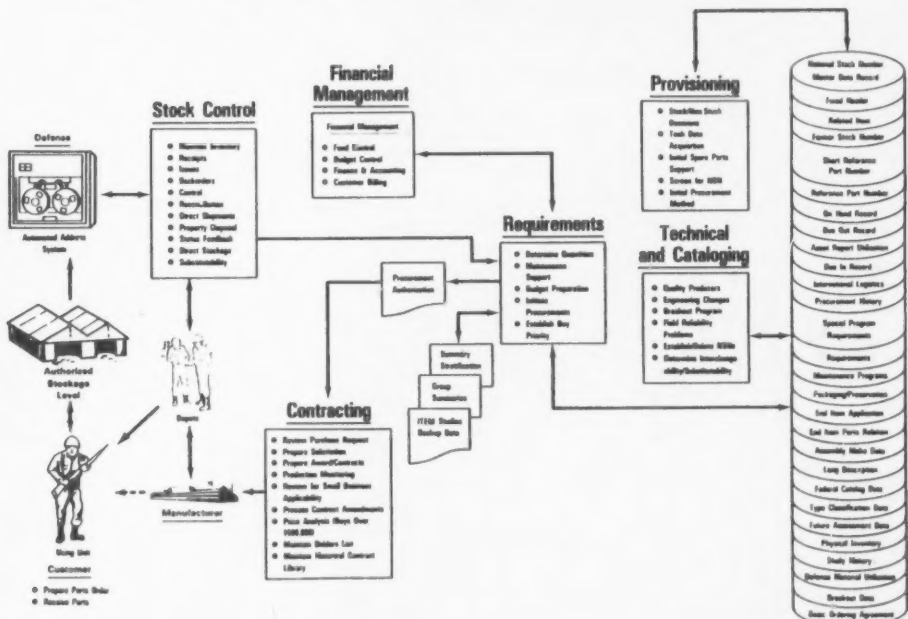
GAO ASSESSMENT

- **Computers Are or Soon Will Be Technologically Current**
- **Computer Software, Except for Army, Are Outdated**
- **Computer Based Information is Limited**
- **Computer Capabilities to Identify and Prevent Unwarranted Price Increases Range From Limited to None**

Our overall assessment (slide 1), based on the short time we had to perform the work, is that (1) computer equipment is or soon will be technologically current; (2) computer software programs, with the exception of the Army's, are logically and technically outdated; (3) computer based information provided officials for buying aircraft engine spare parts is limited; and (4) computer capabilities being used to identify and prevent unwarranted price increases range from limited to none.

I would like to stress that because of time constraints, we are not making specific recommendations. However, I will offer for consideration improvements that can be made which I will discuss later. Before I discuss the specific areas we focused on, I would like to briefly explain how our work fits into the overall wholesale logistics function.

WHOLESALE LOGISTICS FUNCTIONS



As you can see (slide 2), wholesale logistics requires interaction between its various functional subsystems—Stock Control, Requirements, Financial Management, Provisioning, Technical and Cataloging, and Contracting.

When it receives a customer's requisition, Stock Control searches its records to determine if the spare part is a stocked or a non-stocked item. If stocked and available, Stock Control directs shipment of the part to the customer and the usage is reported for historical purposes. If the spare part is not routinely stocked, Stock Control passes a request to Contracting for item procurement. Also, at this time, Requirements evaluates the (1) usage history of the non-stocked spare part, (2) usage forecasts, and (3) budget information to decide whether the spare part should be stocked to meet future demands.

If the spare part is a stocked item but available quantities cannot meet the customer's need, Requirements decides whether to proceed with a procurement or to delay purchase of the spare part because of lack of funds, higher priority needs, etc. An item manager, in Requirements, on the basis of a computer generated supply study, makes this decision. Both Stock Control and Requirements routinely use the computer for these operations.

Once the item manager makes a buy decision, the computer aids in preparing a purchase request which is sent to Contracting. At this time, the buyer receives several documents, such as the purchase authorization, historical pricing data, and a bidders list. As I will discuss later, the use of the computer to produce these as well as other solicitation documents varies among the services. This is the area where we focused our audit work.

When technical and engineering drawings are needed for competitive spare parts procurements, Technical and Cataloging provide a package containing speci-

fications, drawings, dimensions, etc. Other functions technical and cataloging perform include evaluating available technical engineering data to determine what spare parts substitutes are acceptable and what spare parts, provided by a prime contractor, can and should be competitively bought. These are basically manual functions.

Financial Management records financial obligations and commitments, assures that needed funds are available, and bills customers when the ordered spare parts are provided. This is mostly a computerized function.

Provisioning, the last wholesale logistics function, uses initial forecasting information to make stock versus non-stocked spare parts decisions and to establish initial stockage levels. Provisioning also decides (1) whether to buy the spare parts technical data and (2) how the initial spare parts should be bought. This is a manual intensive operation.

Now I would like to address the questions in your letter. Our comments on the computer and software programs focus on support of the overall logistics functions. Our comments on computer based information relate to contracting.

COMPUTER EQUIPMENT

Defense Activity	Type	Date Installed	Remarks
Navy's Aviation Supply Office	Univac 404 (4)	1968-81	• Computer Parts No Longer Made by Univac. • Maintenance Being Withdrawn by Univac. • New Computer Contract to be Awarded in January 1984 with First Delivery Scheduled April 1984.
	Univac Spectra 705 (2)	1979-81	
	Burroughs 4000 (2)	1979-81	
Army's Troop Support and Aviation Material Readiness Command	IBM 4341 - M2	5/80	• IBM 4341 Upgraded to M2 in 1982.
	IBM 4341 - M2	2/81	
	NAS AS-53	8/80	
	NAS AS-53	10/80	
Air Force's San Antonio Air Logistics Center	PKE 3242	5/81	• Major Computer Replacement Program Planned.
	CDC Cyber 170/730	5/82	
Defense Logistics Industrial Supply Center	NAS AS 3000	3/83	• Defense Logistics Has a Major Computer Replacement Program in Process.
	IPL 4446	7/82	
	IPL 4446	8/82	

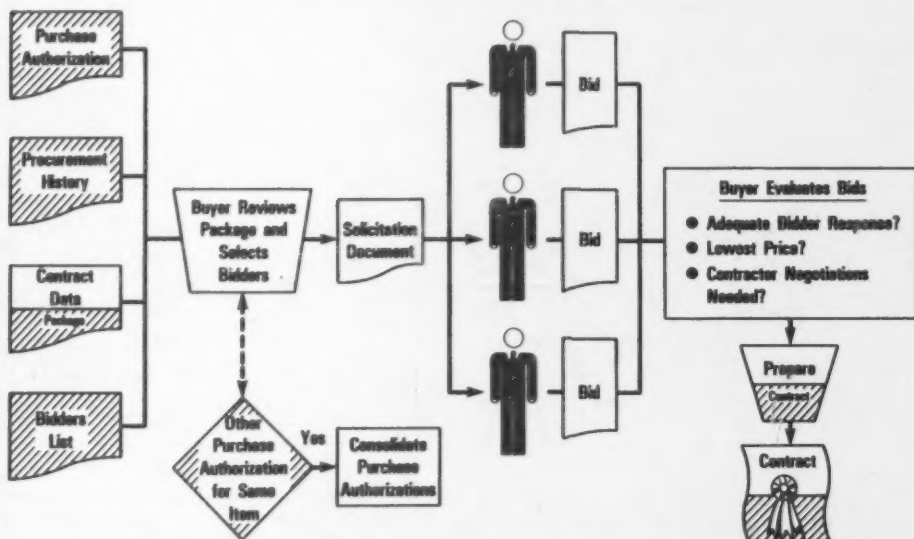
On the question of age, capability, and operating condition of the computers (slide 3), the Army's, Air Force's, and the Defense Logistics Agency's computers are of relatively current technology. The Navy's computers are old and technologically dated. The Navy plans to award a contract for new computer equipment in January 1984 with the first delivery in April 1984. The Army's computers were installed in 1980 and 1981 and were upgraded in 1982. The Defense Logistics Agency's and the Air Force's computers were installed in 1982 and 1983. These computers are an interim step until major computer replacement procurements can be completed. The Defense Logistic Agency's procurement is underway with completion estimated to be in 1986. The Air Force has just started and is now in the planning stage. For these reasons, we believe the computer equipment the services are using to support their wholesale logistics operations is or will be current.

Regarding the computer software programs that support the overall wholesale logistics operations (slide 4), we believe their age and effectiveness, with the exception of the Army's, are logically and technically out dated and that improvements can and should be made. The Army's computer software programs were developed in the early 1970s and operate as an integrated system. Although the Army must continually refine its programs to improve their effectiveness, it does not plan a major redesign at this time. The Defense Logistics Agency, along with replacing its computers, plans a major redesign of the software.

The Air Force's and the Navy's computer software programs are a collection of independent programs. Data processed by these computer programs must be

Now I would like to turn to the results of our work on computer generated information provided to the buyer. Referring to the slide (slide 5), I ask you to recall that the buyer's role is one of many in the overall logistics process.

CONTRACTING FUNCTIONS



The next slide (slide 6) shows the basic functions performed by the buyer and the information available—automated and manual. The process is shown as beginning on the left and moving to the right. The shaded areas represent computer generated input to the buyer and the half shaded areas indicate there are some manual processes that must be completed by the buyer in some services.

As we see it, in competitive procurements, the buyer has two major decision points. The first includes reviewing the procurement package and selecting contractors who will be asked to make a bid. The second involves evaluating the bids received against certain criteria and selecting a contractor. We have included, as represented by the dotted line, a decision function unique to some of the services. Using a remote terminal, the buyer can access the computer to get additional information on other purchase requests for the same item. This allows the buyer to consolidate the purchase requests and perhaps obtain lower prices per item by buying in larger quantities. We found instances where the buyers did not consolidate multiple purchase requests for the same item. I will discuss these later.

For sole source procurements, although the number of documents provided to the buyer are less, the process is equally relevant. The buyer must still review the documentation for completeness. However, there may be instances where the buyer knows other sources of supply and can question the need for a sole source procurement.

BUYER DOCUMENTS

Purchase authorization.
Procurement history.
Bidders list.
Contract documents.
Price variance report.

The next slide (slide 7) identifies computer based information provided to the buyer. The first is the Purchase Authorization which is the buyer's notice and authority to begin the contracting process. The next three—Procurement History, Bidders List, and Contract—are tools available to the buyer to complete the contracting process. The last—Price Variance Report—is a management tool that can be used to identify spare parts price increases that should be investigated.

1. (1) - 251 WORKSHEET (4250)
NAVSUP FORM 1275 (4C) (REV 2 70)

PAGE 8 00095

1. CONTRACT NUMBER		2. CONTRACT SYMBOL		3. CONTRACT SYMBOL		4. FSA ACR	
N00383-83-X-8240		0001		ZRH 0110-00-058-1133 FA		B2303 T 4	
5. PROJECT SYMBOL		6. QUANTITY		7. UNIT PRICE		8. REPLACEMENT PRICE	
16		3,210.00		2,998.70		47,819.20	
9. EXTENDED VALUE		10. EXTENDED VALUE		11. EXTENDED VALUE		12. EXTENDED VALUE	
16		3,210.00		2,998.70		47,819.20	
13. SPECIAL MATERIAL		14. SPECIAL MATERIAL		15. SPECIAL MATERIAL		16. SPECIAL MATERIAL	
2A		3 H		20125		KE U N N S N N	
17. APPLICATION CODE		18. APPLICATION CODE		19. APPLICATION CODE		20. APPLICATION CODE	
1E86AXX		5CPCU		TQ		8.60	
21. DISCOUNT		22. DISCOUNT		23. DISCOUNT		24. DISCOUNT	
6.0		A1B		D 79.42 L		83250 I 08 22	
25. SPECIAL MATERIAL		26. SPECIAL MATERIAL		27. SPECIAL MATERIAL		28. SPECIAL MATERIAL	
AF		NE26 AA 1731506		65JC 260 01401		0 000385 1F 000385 00000000KROFA 47819.2	

Material Accounting Division (383)

47,819.20

1-21-5

Signature *J. A. Bell*

CLIN	FC	ACR	ACTY	QTY
0001	AF	AA	N00229	10
0001	AF	AA	N00620	6
70210	NO	ADDITIONAL DATA	PRE AWARD LRC	POST AWARD LRC
2	40038378A8106	0157 0001	70210 79092	1,976,820 19 5 0 N 1
2	40038378A8106	0399 0001	70210 80147	2,835,400 8 5 9 N 1
2	40038378A8106	3387 0001	70210 80166	3,318,000 3 5 1 N 1
*	40038378A8106	0378 0001	70210 80113	2,744,670 12 5 9 N 1
*	40038381G1104	0149 0001	70210 81264	2,988,700 10 5 1 N 1
*	40038381G1104	0008 0001	70210 81096	3,146,000 17 5 1 N 1
	NSA40075C3781	0001	6H351 74353	1,392,000 16 5 0 N 1
	NSA40076C1766	0001	6H351 75296	1,405,000 17 5 0 N 1
	40038376A6107	0402 0001	70210 77299	1,375,200 15 5 1 N 1
	40038376A6107	0542 0001	70210 78054	1,492,830 6 5 0 N 1

(CONTINUED ON NEXT PAGE)

I will now discuss each of these in detail. All the services have a Purchase Authorization document that the computer produces. Most describe what is being bought but the Navy's does not. For example, looking at the next slide (slide 8), I'd like to see if any of you can identify what is being ordered? Do you know what it is? What it might look like? If so, can you estimate how much it should cost? The item being bought by the Navy is an "actuating ring" used to control air intake into an aircraft engine and costs about \$2,000.

The next document, Procurement History, is one of the tools the buyer has available for completing the contract. It contains such information as prior contracts awarded, and other related information. The number of prior contracts and other information varies by service. For example, the Navy can identify contracts awarded in the last 10 years and the Air Force identifies contracts awarded in the last 3 years. The Army can provide information on up to the last 10 contracts and

the Defense Logistics Agency up to the last 6 contracts. For the Army and the Defense Logistics Agency, this means that if all the buys were made in the last year, only that year of procurement history would be provided. Adding more procurement history information would give the buyer a longer price trend line and assist him in making the required "fair and reasonable" price determination.

The Bidders List is the next tool the buyer has available for completing the contracting process. Not all the services have an automated Bidders List and not all buyers automatically receive one for every service. The Navy's Bidders List is a manual compilation by each buyer of known bidders identified through the buyer's own past efforts and experiences. The Army does not automatically generate a Bidders List for the buyer on purchases less than \$25,000. The buyer must specially request that one be provided.

The Defense Logistics Agency Bidders List identifies the names and addresses of bidders. The Army gives the same information, plus phone numbers, of available, and other coded information on the contractor. The Air Force's Bidders List gives the buyer the most information.

Automated Contracts are another tool the buyer has for completing the contracting process. To a degree, all services have some form of automated contracts. The Army and the Defense Logistics Agency have automated contracts for small purchases—the Army less than \$25,000 and Defense Logistics Agency less than \$10,000. The Air Force and the Navy have automated contracts for all purchases, but the Navy automates only certain portions of the contract. The buyer must make manual entries and tailor the remaining portions of the contract before it is sent out for reproduction.

The final document, the Price Variance Report, can be a buyer and management control tool for identifying spare parts price increases that exceed parameters set by management. The Defense Logistics Agency is the only organization that uses the computer to report spare parts price increases. However, this report is limited to contracts of less than \$1,000. All but one Defense Logistics Agency supply center identifies and reports price increases greater than 25 percent or \$25. The Defense Industrial Supply Center uses 50 percent or \$35.

DLA's PRICE VARIANCE REPORT

MOTHERHOOD, APPLE PIE AND COMPETITION						SAVE WITH COMPETITIVE BIDDING				
PF-100	DISC	PSZ	PART 1	VENDOR PRICE VARIANCE REPORT				AS OF 11 SEP 83 PAGE 0007		
50% AND 100% VALUE USED FOR PRICE COMPARISON										
VENDOR CODE	BPA/DTC	CALL NR	PR NUMBER	UN	QTY	VENDOR PRICE	TOTAL PRICE	SHIP DATE	BASE PRICE	NSN/PART NUMBER
85527	DLA8003A	0000158	YPM3212000051	EA	5	7.65000	38.25	09/00/83	.71000	530500001127

The next slide (slide 9) shows an example of the Defense Logistics Agency's Price Variance Report. Note that the report shows that the current price of \$7.65 versus \$.71 which was the lowest price paid for the item over the last 12 months. This is more than a 10 fold increase, greatly exceeding the 50 percent management criteria used at the Defense Industrial Supply Center. This particular item is a "retainer ring", similar to a washer. We are showing you this to emphasize how the computer can assist management by flagging price increases.

The next slide (slide 10) summarizes what I have told you the services have now.

Now that I have discussed and shown you the computer based tools given the buyer for contracting for spare parts, I would like to go over two examples of spare parts procurements that could have been done better if more automated information had been provided or the buyer had made better use of available information. However, I'd like to emphasize that these are just examples of what we observed happening and are not intended to indicate widespread problems.

Service		Naval	Army	Air Force	DIA
Buyer Documents					
Purchase Authorization	New	● Purchase Worksheet - Same Item Description - Quantity/Procurement Method - Funding Data (Weekly and Monthly)	● Procurement Work Directive - Same Item Description - Quantity/Procurement Method - Other Pending Procurements (2 Times a Week)	● Purchase Request - Same Item Description - Quantity/Procurement Method (As Required)	● Shipping Instructions <\$1,000 ● Procurement Worksheet/Item Description >\$10,000 - Both Cite Same Item Description, Quantity and Procurement Method (3 Times a Week)
Procurement History	New	● Purchase Worksheet - Can Be For 0 to 10 Years	● Procurement Work Directive - Can Be Up To 10 Days	● Procurement History Record - Can Be For 3 Years ● Daily Procurement Status Report Generated	● SAS Trailer <\$1,000 ● RFG Trailer >\$1,000 and Manual ● Both Can Be Up To Last 5 Days
Bidders List	New	Manual	● Only an Advertised and Competitively Regulated Bids Then \$25,000 ● Upon Request for Simplified Purchases Less Than \$25,000 (Personal "Call" Records Used)	● For Procurement Requests Greater Than \$2,000	● RFG List >\$1,000
Automated Contract Documentation	New	● Solicitation Documents - RFPs, RFQs, IFBs - Cover < Standard Clauses ● Contract Awards ● Delivery Orders	● Solicitation Documents - RFPs, RFQs, IFBs - Technical Data Package (Aerospace Carried) ● Contract Awards for Less Than \$25,000 ● Delivery Orders for Basic Ordering Agreements	● Solicitation Documentation - RFP ● Delivery Order for Supplies ● Contract Awards	● <\$1,000 - Shipping Instruction - Vendor Response Card ● \$1,000-\$10,000 - Request for Quotation - Vendor Quotation Card ● Manual - Request for Quotation ● Contract Document - Shipping Instructions <\$1,000 - Order for Supplies
Price Variance Report	New	None	None	None	● Price Variance Report Limited to Days <\$1,000 - 50% or \$35 at Dis. - 25% or \$25 at All Other Centers

My first example is an Army procurement of a frame assembly (slide 11). Observe that in the upper right corner of the Procurement Work Directive for buyer 1 and 2, both procurements were started in May 1983 within 8 days of each other. On the procurement started on May 20, right side of the slide, the procurement directive told the buyer that the first buy was still unawarded. This information is provided so multiple buys for the same item can be consolidated whenever possible.

ARMY'S FRAME ASSEMBLY EXAMPLE

Buyer #1
PWD

Buyer #2
PWD

[illegible][illegible]

ARMY'S FRAME ASSEMBLY EXAMPLE

Buyer #1
Automated
Contract
Document

Buyer #2
Automated
Contract
Document

Our next example is of an Air Force procurement of a door seal retainer for the C-5 aircraft.

AIR FORCE'S DOOR SEAL RETAINER

Procurement
History

On the procurement history (slide 14), left side, is a number that indicates there was another purchase request for the same item being processed. The other number, 6WR, specifically identifies the first buyer. When the second buyer received a proposed price of \$188 per unit and compared it to the \$130 cost on the procurement history, the buyer questioned the contractor about the new higher price. The buyer was told it was an "extrusion" product that had to have holes drilled in it. Therefore, with only limited data to question the price, the buyer

accepted Lockheed's "Certification of Data in Support of Proposal Price Break-down". This certification stated:

Planning and tooling	-----	\$1.06
Production	-----	13.75
Quality assurance	-----	1.21
Material and parts purchased or subcontracted	-----	121.54
Total factory unit cost	-----	137.56

To this total, allowable expenses and profits of about \$50.00 were added for a total selling price of \$188.06. Although shown on the certification as \$188.95, the Air Force was able to negotiate away the 89 cents difference.

The points of this example are:

This spare part was bought on a sole source basis and the technical drawings are proprietary. Therefore, competition was precluded.

Two procurements were in process at the same time for the same item, and were not coordinated or consolidated.

The first buyer's contract, for a quantity of 22, was awarded at a unit price of \$77.67. The second buyer's contract, for a quantity of 29, was awarded at a unit price of \$188.06 (slide 15).

AIR FORCE'S DOOR SEAL RETAINER Contract

02 DEC 30
20 DEC 1982

MAILING DATE

REQUEST FOR QUOTATIONS NO. 1

ORDER FOR SUPPLIES OR SERVICES

789601-79-G-0500

San Antonio Air Logistics Center
Kelly Air Force Base TX 78241
Area Code 512-925-6891
BUYER: D. Wharton/PWMAA/rav

Lockheed Corp
Lockheed-Georgia Co Div
86 South Cobb Dr
Marietta GA 30063

411 AFHQD LOCKHEED-GEORGIA CO
Marietta GA 30063

SEE SCHEDULE

1560-00-401-5575LH
REPAIR SEAL-DOOR
Lockheed Corp
P/N: 4F54242-1108

29 Ea \$188.06 \$5,453.74

EXTENT OF QUANTITY VARIATION (1065 APR) (DAR 7-103.4(b)) The permissible variation under the clause of the General Provisions entitled "Variation in Quantity" shall be limited to:

Increase 05% Decrease 05%

This increase or decrease shall apply to items 0001 and 0003.

This is \$110.39 more than the first buyer's contract which was for a quantity of 22 each.

The buyers had no idea that what was being bought was a standard strip of "extruded" aluminum alloy about 14 inches long, 5/8 inches wide with 7 attaching holes drilled in it.

Air Force technical engineers examined this part and concluded that it can be fabricated at a unit cost of \$6.81 when 25 are made and \$4.62 for 400. These engineers stated that no special testing requirements were needed because the part is not a fatigue critical item.

In response to an Air Force inquiry on this spare part, Lockheed's October 10, 1983, letter states the quote for \$188.06 was "correct for pricing policies at that time, but was higher than normal as a result of a minimum buy of peculiar raw material that was not carried in stock. Total procured material was priced into this contract." This means Lockheed purchased 4,260 feet of aluminum and allocated the cost to the 29 parts being ordered by the Air Force. We were told by Air Force engineers that the aluminum is available in 10 foot lengths at a cost of \$2.70 per length. Lockheed's newly adjusted price per unit is \$32.00. This new price is about \$25.00 more than Air Force engineers concluded that a quantity of 25 "should cost."

I'd like to reemphasize that these are examples of what we observed happening in the contracting process and are not intended to indicate widespread problems.

Now I'd like to tell you about some of the actions that the services are taking to help the buyer do a better job and to achieve lower spare parts prices (slide 16).

COMPUTER BASED INFORMATION

Service Buyer Documents		Navy	Army	Air Force	DLA
Purchase Authorization	Started	—	• Project Spare parts to be Brought Next Year	—	—
Procurement History	Started	• Contractor Profile	None	• Value Engineering — "Should Cost" Data	• Value Engineering — "Should Cost" Data • Automated Price Review Historical File — Pricing Practices — Contractors and Patterns
Bidders List	Started	• Increase Competitive Awards	• Competition Advocate	• Competition Advocate	• Competition Advocate • Market Research
Automated Contract Documentation	Started	• Cost Factor Analysis • Eliminate Unpriced Pratt Whitney Orders	• Expand Computer Prepared Contracts to All Types of Contracts Awarded • Restrict Unpriced Orders	None	None
Price Variance Report	Started	None	• Price Variance Report — Increases > 25% Must be Justified By Buyer	None	• Special Post Award Review Board — Challenge Unwarranted High Prices and Negotiate Reductions

For the Purchase Authorization you see several areas where two dashes are entered. This indicates no action is needed or is being taken to improve the Procurement Authorization documents and is not necessarily a deficiency. However, note that the Army is taking some action to improve its spare parts procurement planning. On Procurement History, the Navy is including more information on contractor practices. The Air Force is developing a value engineering "should cost" capability to determine what the Air Force should expect to pay for the spare parts and to print this on the procurement history. On the Bidders List, each service has started or plans action to increase competition by identifying additional contractors they can call on to provide needed spare parts. Reading across note that the Navy is increasing the emphasis on competitive awards and the other services are appointing competition advocates. With automated contract documentation, note the Army and Navy are restricting use of unpriced orders. Restricting unpriced orders reduces the number of spare parts that can be ordered without knowing what their actual costs will be. Lastly, on price variances, the Army is developing a price variance reporting capability. We agree these efforts are a step in the right direction, but more can be done and we offer some areas for consideration.

As we see it, the buyer has many tasks where the computer can help improve productivity, increase competition, and help the buyer identify price increases for review (slide 17).

COMPUTER BASED INFORMATION

Service		Navy	Army	Air Force	DLA
Buyer Documents					
Purchase Authorization	Consider	—	—	—	—
Procurement History	Consider	• Item Profile • "Should Cost" Data • "Layman" Tech Data • Analysis of Alternative Quantities	• Contractor/Item Profile • "Should Cost" Data • "Layman" Tech Data • Analysis of Alternative Quantities	• Contractor/Item Profile • "Layman" Tech Data • Analysis of Alternative Quantities	• Contractor/Item Profile • Layman Tech Data • Analysis of Alternative Quantities
Bidders List	Consider	• Market Research • Competition Advocate	• Market Research	• Market Research	—
Automated Contract Documentation	Consider	• Expand Automated Contract Preparation • Analysis of Alternative Quantities	• Cost Factor Analysis • Analysis of Alternative Quantities	• Cost Factor Analysis • Analysis of Alternative Quantities	• Cost Factor Analysis • Expand Automated Contract Preparation • Analysis of Alternative Quantities
Price Variance Report	Consider	• Price Variance Reporting • "Should Cost" Data	• "Should Cost" Data	• Price Variance Reporting • "Should Cost" Data	• Price Variance Reporting on All Contracts • "Should Cost" Data

Beginning with the Procurement History, this document could include computer-based information giving (1) the "should cost" data, (2) technical data in "layman" terms, (3) contractor and item profile information, and (4) alternative quantity analysis is also suggested for Automated Contract Documentation. I will discuss it later.

The "should cost" information, or putting it another way, intrinsic value of the item, would provide the buyer a technical basis for assessing the reasonableness of contractor proposed prices. Technical data in "layman" terms would help the buyer understand what is being bought and what production cost factors might influence a contractor's proposed price. Contractor and item profile information would provide the buyer information on the contractor's past performance, prior pricing, negotiating practices, and cost information on items similar to the one being procured.

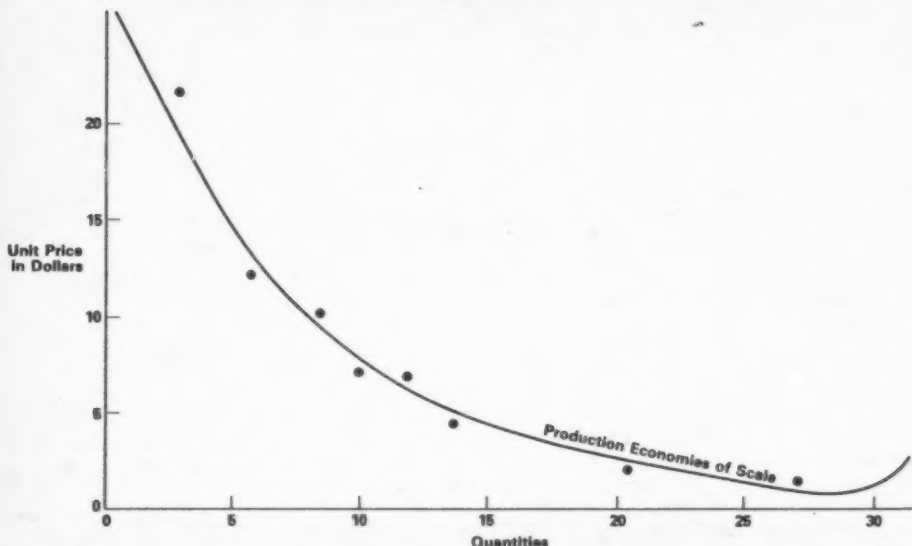
The next area for consideration relates to the Bidders List. They would help foster competition and expand the buyer's knowledge of the marketplace. In his July 25, 1983, memo on "Spare Parts Procurement 10 Point Program", Secretary of Defense Weinberger stated that all of the services had a competition advocate in each buying command. However, we found that all the services do not have one in place. This may be because the program is relatively new. We don't know if a competition advocate is needed but we do believe market research techniques should be emphasized. Such techniques could include identifying new sources of supply, that would then be placed in the computer and used for expanding the number of contractors listed on the Bidders List. Also, we believe that a Bidders List should be provided to the buyer for every competitive procurement—regardless of dollar value. If a Bidder List had been given to the two Army buyers in our example, it may have been prevented them from contracting for the same item on the same day from two different contractors at prices that differed by about \$270.

The areas for consideration that support Automated Contract Documentation are (1) automating the buyer's need to analyze contractor proposed cost factor analysis, (2) increasing the use of the computer for preparing solicitation and contract documents, and (3) using the computer to analyze alternative quantity proposals. The Navy recently developed a computerized mathematical model for analyzing contractor proposed cost factor changes, such as new labor rates, overhead, etc. Before this model was developed, it took Navy buyers 3 to 4 hours to

manually determine the "bottom line" effect of any contractor proposed change. Now, using a computer, the buyer can get the results in a matter of minutes. Another area where the computer could be used to reduce the buyer's administrative tasks. The computer could prepare more of the solicitation and contract documents for all types of procurements.

Finally, we believe the government should encourage contractors to offer alternative quantities. Current contracting provisions permit the government to do this. Thus, contractors could offer alternative quantities at varying unit prices that would reflect their production economies of scale. However, in many instances, the quantities requested are so small they limit the contractor's ability to recover costs. If encountered to do so, we believe contractors would propose alternative quantities and prices and the computer could be used to analyze the various proposals that are received. The buyer could then make an informed buy decision on quantity and cost—within procurement funding parameters. Looking at the slide (slide 18), you can visualize how increased production quantities should result in lower unit prices.

COMPUTERIZED PRICE VARIANCE ANALYSIS



Now I would like to turn to the area that has received a great deal of attention—unwarranted spare parts prices. We believe the computer can be useful in identifying potential unwarranted price increases by reporting (1) price variances and (2) "should cost" information.

As I mentioned earlier, computer-based price variance reporting is currently limited to the Defense Logistics Agency's small purchases that are less than \$1,000. However, the Army is developing a price variance reporting capability and procedures to require the buyer to justify price increases that are greater than 25 percent. We believe such automated reporting capabilities for all services and for all procurements would help buyers and managers flag price increases that should be analyzed to determine if the increase is unwarranted.

SUMMARY

To summarize, you asked us to look at the computer equipment and software that support procurement activities and to focus our work on computer generated products being used to identify unwarranted price increases.

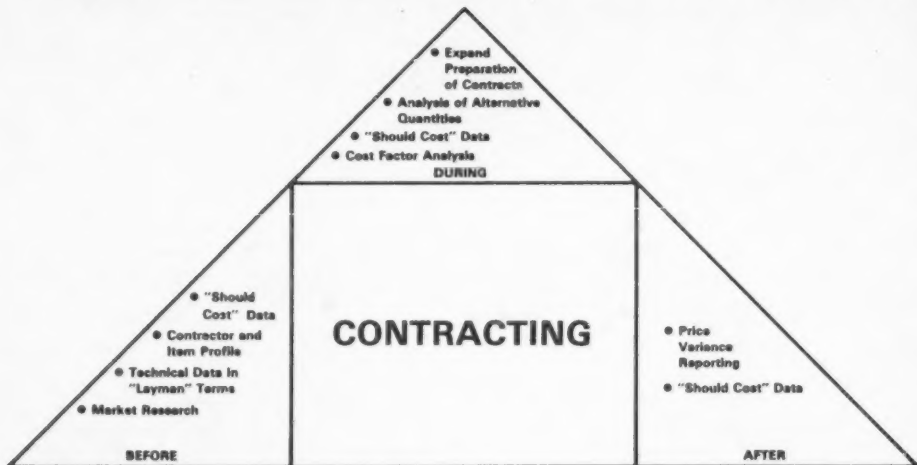
GAO ASSESSMENT

Computers are or soon will be technologically current.
Computer software, except for Army, are outdated.
Computer-based information is limited.

Computer capabilities to identify and prevent unwarranted price increases range from limited to none.

We did that (slide 19), and our overall assessment is (1) the computers are or will be technologically current; (2) the software, with one exception, is outdated; (3) the computer-generated products and information for procurement officials to use are limited; and (4) the computer capabilities designed to identify and prevent unwarranted price increases range from limited to none. We have also discussed the services' efforts to improve the procurement of spare parts and identified areas where we believe automation could help the buyer before, during, and after contracting (slide 20).

PROPOSED AREAS FOR AUTOMATION



These computer-based changes can increase the buyer's productivity, expand spare parts competition, and help identify unwarranted price increases. To the extent that our considerations are not already a part of software improvements planned by the services, we believe they should be.

Mr. Chairman, I remind you that the area we looked at to respond to your request is but a small segment in the overall logistics process. Many of these functions, where more work needs to be done, also affect pricing.

GAO's new division, the Information Management and Technology Division, was formed in July of this year and is responsible for GAO work in computers, information technology, and communications. Its Defense Logistics Systems group is now identifying and planning its audit priorities for the next several years. Although we believe the computer offers many opportunities for making significant improvements, even the most modern computers and software cannot substitute for effective buyer practices, as our two examples have illustrated. Contracting officers and buyers are oriented to support military requirements and buyers work for contracting officers. In other GAO reviews on spare parts procurement we are finding that buyers are being rated on their ability to award large numbers of contracts and not on their actions to prevent or resolve unwarranted spare parts price increases.

While we agree that productivity is important, we believe pricing reviews and attention to suspected over-pricing should be considered when the buyer's performance is being evaluated.

This concludes my testimony. I am ready to answer questions you may have.

Senator NUNN [presiding]. Senator Tower will be back in a moment. He has several questions. I have just a couple.

I think your analysis will be very helpful.

Do you believe that legislation is required in this area?

Do you have the general view that the services are going to move in a timely fashion in accordance with the recommendations you have made?

I understand that you are saying that the computers are technologically capable, but you are saying they are not being properly utilized.

Mr. REED. That is correct.

[Additional information follows:]

The computers the services have are not being exploited to produce the economic results that should be achievable. Regarding your other questions, we do not know if legislation is needed or what additional legislation might help the services do a better job. Concerning our areas for consideration, we believe many actions have been started but it is too soon to tell whether all the areas we suggest are included. That is why I said that where our areas for consideration are not already part of the services and Defense's software improvement plans they should be.

Senator NUNN. I guess technologically capable means hardware and not software?

Mr. REED. That is right. The big challenge that the services and agencies have to face is streamlining their software capability to maximize the computer support provided buyers, the person on the firing line.

Senator NUNN. Do you think they are doing that?

Mr. REED. I do not know how far the services have or will go in adopting the actual changes we are suggesting. We looked at the computer capability they now have and we acknowledge that they all have plans for improving those capabilities. However, we did not have time to assess their plans for improving their software.

Senator NUNN. I would like you, Mr. Reed, to go ahead and pursue this and report to the committee.

Mr. REED. Yes, sir. We will be glad to include such an assessment in our future audits of systems and provide a copy of our report to the committee.

Senator NUNN. The Levin amendment requires the Department of Defense to establish regulations requiring approval by supervisors of procurement where the price of a spare part exceeds the threshold established by the Secretary of Defense. This amendment's main purpose was to flag large price increases. Is this similar to what you call the threshold approach?

Mr. REED. Yes, sir. We are in effect endorsing the computer as a tool that can be used more extensively by all the services to report price variances.

Currently the services could but do not do this. The services have the mechanism for identifying price increases and this could help satisfy the legislation that you just alluded to.

Senator NUNN. You would agree with this legislative process?

Mr. REED. Very definitely.

Senator NUNN. Thank you.

Senator Bingaman?

Senator BINGAMAN. Let me ask a couple of questions on this price variance reporting.

I guess your testimony is that the only agency that is now doing it, of those you reviewed, is the Defense Logistics Agency, and that it

has the computer capability to really try to assess what has been paid for the same part; is that accurate?

Mr. REED. That is correct. The Defense Logistics Agency is the only one that uses such a capability.

Senator BINGAMAN. And they only do it for items of less than \$1,000.

Mr. REED. That is correct. It is only used for those procurements that are less than \$1,000.

Senator BINGAMAN. Why would they want to do it for items of less than \$1,000 rather than items of more than \$1,000? Is there some logical explanation for that?

Mr. DORE. The explanation is that the \$1,000 threshold is for the total cost of the procurement. It is not on the unit price of the item.

Senator BINGAMAN. You mean that if the Defense Logistics Agency is in fact only buying \$1,000 or less from the contractor, then they get information, not \$1,000 per item?

Mr. DORE. It is used when the total contract cost for a value of less than \$1,000, then it most likely will be handled by a small purchase contracting procedure which is highly automated. One report is a check on what the computer has produced.

The price variance report is used to identify the individual unit spare parts prices that have increased by a certain percentage when the total contract value is less than \$1,000.

Senator BINGAMAN. What percent of the money spent by the Defense Logistics Agency in procurement falls in the category of \$1,000 or less?

Mr. DORE. The percentage of dollars spent is small but the number of transactions is high. For the spare parts procured during fiscal year 1983 the percentages were about 2 percent for the dollars spent and about 40 percent for the number of transactions that were less than \$1,000.

Senator BINGAMAN. You are saying that of the total procurement done by the Services, there is one agency that has comparative information available to it by computer?

Mr. REED. That is correct.

Senator BINGAMAN. And that one agency is using it only for procurement where the total amount being purchased is less than \$1,000, not per item?

Mr. REED. That is correct.

Senator BINGAMAN. It strikes me we are talking about a very, very small percent.

Mr. REED. We would agree. That is why our assessment was, if you recall, that the computer capability in this area is very limited and what we are endorsing is that they apply this kind of capability across the board, all services and agencies, and probably minimize the kinds of thresholds that are currently in practice.

Senator BINGAMAN. Are there comparisons that could be made with the private sector? Are there any large companies, General Motors or anybody else, who are in the business of substantial purchases from subcontractors or otherwise that would have a need for this kind of capability as well to be able to assess what they are being offered items for?

Do you know of any such comparison where we are looking to the extent to which private companies are using computer capability to do this?

Mr. REED. I don't have any such comparisons.

Mr. CSICSERI. During our audit we looked at what one airline was doing to get spare parts. We learned that the manner in which they obtain spare parts is much different from how the Government does it. They order differently, they stock differently and they have more latitude in buying or manufacturing the spare parts. It would be difficult to get a definite correlation between the way the Government orders and the way this airline operates.

Senator BINGAMAN. How expensive a procedure are we talking about here to implement this?

If the Defense Logistics Agency were to try to take this comparative approach and apply it across the board to all procurement that they do, where they buy items that have set prices, how much would we be talking about to get that kind of thing implemented?

Mr. REED. I can't give you an absolute answer. Perhaps my associates can give you a ball park answer.

Can we? Otherwise, we might try to respond to that for the record. [The information follows:]

Mr. REED. The Defense Logistics Agency said that such a reporting capability is not needed. They said the buyer already performed the functions that a price variance report would serve, that is, spare parts procurements that exceed \$1,000.

Senator BINGAMAN. They do have plans to do that.

Mr. CSICSERI. I think we could respond for the record.

[The information follows:]

Mr. CSICSERI. The only plans we are aware of are those the Army has made to develop a price variance reporting capabilities. The Army estimates it will take about 6 months before such a reporting capability is operational. Officials were unable to provide us a cost estimate for their program because it was being extracted from other computer programs developed and being used for other purposes.

Mr. REED. If I may, I understood the question that the Senator was making is if they implemented these additional computer capabilities like price variance reporting that we have an idea at least of what the cost would be of doing that.

Senator BINGAMAN. Yes. What are we talking about here timewise and costwise to get this price variance information to the people who are making the judgments on what we buy and what we pay for it?

I have additional questions that Senator Tower has prepared. I will submit these to you and ask you to submit your responses to him. I think that would be the best way to do it.

Let me ask the extent to which you encountered any kind of meaningful cooperation among the various services in getting this computer capability on line.

Is the Defense Logistics Agency making efforts to get this done, cooperating and sharing its experiences and problems with the other Services so that we are not going to have to reinvent the wheel all around the Defense Department?

Mr. REED. I think they are, but I will have to ask my associates to elaborate on that.

Mr. DORE. Senator, we believe if agencies like the Defense Logistics Agency are asked, they will share their experience with the other services. However, what we did find is that the individual services

have their own plan of action for what they think needs to be done and how to do it. There are a number of attributes that we listed on our triangle slide that the services will be implementing individually. But there is no across-the-board coordination among the services or direction on how to approach this.

Senator BINGAMAN. Do you believe it would be helpful, for example, to have a uniform approach in the development of software, which you indicated is a major deficiency shared by all of them at this point except maybe the Army * * * I guess the Army has deficiencies in their software as relates to price variance?

Mr. DORE. Yes. However, they are developing a price variance report capability.

Senator BINGAMAN. Would it be helpful to have that software prepared on a unified basis or at least shared so that everybody has access to what the other one is doing?

Mr. REED. Without question.

Senator BINGAMAN. I think that would be an interesting idea to get your assessment of as well as whether you think that we need to mandate legislation from the Congress in order to insure that we are not seeing software developed all over town without having had the benefit of what other people are doing.

Mr. REED. All right. I will provide that for the record.

[The information follows:]

Mr. REED. In prior GAO reports on subjects such as DOD's development of a Tri-Service Medical Information System (TRIMIS), we reported that even with Secretary of Defense direction and guidance, the services have a hard time agreeing on a unified approach to a common problem or computer application. Other examples are payroll, accounting and Defense warehousing type computer applications. Regarding the need for and benefit of a congressional mandate to insure standard software is developed, I believe Congress can help by continually encouraging agencies through the authorization and appropriation process to standardize software.

Senator BINGAMAN. Thank you, Mr. Chairman.

Chairman TOWER. Mr. Reed, in your testimony you describe the use of automating contracts apparently requiring very little human intervention. The thresholds you mentioned, for the Army, less than \$25,000; for the Defense Logistics Agency, less than \$10,000, are not inconsequential.

By using these fully automated contracts, are we in fact committing to those items without the benefit of any sort of human review judgment as to the value of the part being purchased?

Mr. REED. No, sir. There is human intervention in the contracts you asked about. Only on those contracts that are less than \$1,000 in the Defense Logistics Agency, and in the Air Force, less than \$500, can there be an award that is completely or entirely automatic.

There could be some special measures for human intervention for those occurrences. However, I have difficulty making an assessment about whether the potential negative impact of the absence of human intervention requires some kind of corrective changes.

Would you have anything to add to that, Tony?

Mr. CSICSERI. No.

Chairman TOWER. Mr. Reed, it occurs to me that one of the ways to increase competition is to expand the number of manufacturers on any particular bidders list.

Are we employing our computer equipment to facilitate the addition of new bidders to that list or are we somehow frustrating their efforts?

Mr. REED. First of all, we are using computers. Again, there are different criteria, depending on which service we are talking about in terms of when they use the computer to crank out the bidders list.

But, it is not clear to me that they are employing the bidders list to the maximum, or at least the computer-generated bidders list.

I think, for example, I would encourage greater use of the computer and probably eliminate the thresholds they have for determining whether or not a computer provided list is given the buyer.

In terms of the frustration factor of the buyer in using a computer, it is not clear to me that that has been a factor. I have no information that that has been a problem.

Chairman TOWER. Each of the services appears to have its own method of management of the bidders list.

Do you find any justification for these different practices?

Mr. REED. Not really. The differences may be there because of the tradition, et cetera, but I see no basis or justification for the different practices.

Chairman TOWER. Mr. Reed, we would like you to go ahead and complete your assessment of what they project in the way of hardware and software and the extent to which they will cure the problem and report back to us later on that.

Mr. REED. Yes, sir, I will be glad to include such work in our future audits of the individual services and provide the committee copies of the reports.

Chairman TOWER. I believe we will have some additional questions to submit to you for response in writing for the record.

Mr. REED. Fine.

Chairman TOWER. Senator Bingaman, do you have any more questions?

Senator BINGAMAN. I will have some for the record. I appreciate the testimony.

Chairman TOWER. Thank you very much, Mr. Reed.

Mr. REED. It was my pleasure.

[Questions submitted by Senator John Tower to Mr. Warren G. Reed, to be answered for the hearing record follow:]

QUESTIONS SUBMITTED BY SENATOR JOHN TOWER

COMPUTATION

Senator TOWER. Mr. Reed, the committee has learned that approximately 75 days are required by the Air Force in order to complete a spare parts requirements computation. Given the capability of modern data processing equipment this seems to be an inordinately long period. Would you explain the purpose of this computation and also offer your opinion as to why it requires 75 days to complete.

Mr. REED. The DO41 requirements computation computes requirements for recoverable consumption-type replenishment spares. Requirements reflect the average material support requirements for Air Force operations. The computation worksheet and back-up data development make up the official record to substantiate the acquisition program, budget projections, and other logistics actions.

According to the Air Force, the long period of time is required to integrate data from 12 interfacing systems. Recoding of data is required from these 12 systems to create compatibility with the requirements computation system. These actions are required because a compatible data base for all information is not

yet available. These actions take approximately 15 days and occur after all data has been reported. Contractors are allowed 30 days to report repair data. Approximately 45 days into the cycle the initial computation is created. Fifteen days are provided to make manual entries to the computation after which time the final computation is then processed. This process takes an additional 15 days and 5 days to produce the additional budget product—total of about 70 days.

We understand that this is a common problem at all the Air Logistics centers. We expect to address this and other supply problems in our future audits and will provide copies of our reports to your committee.

Senator TOWER. What benefits would you expect to derive from a shorter computation period?

Mr. REED. The Air Force said it expects more current data. Currency will be realized as a result of availability of continuous on-line file update and information retrieval. We have not reviewed Air Force plans to determine if these benefits can be achieved.

Senator TOWER. Will new data processing equipment for the Air Force shorten this computation period or is it strictly a function of computer software?

Mr. REED. According to the Air Force, new equipment will provide the ability to maintain the requirements data on on-line so that the requirements computation can be created in an interactive request mode rather than by batch process. Software can be developed to do this now; however, it requires a complete up-to-date data base which is not yet developed.

QUESTIONS SUBMITTED BY SENATOR ROGER JEPSEN, ANSWERS SUPPLIED BY MR. JOSEPH H. SHERICK

EMPLOYEE EVALUATIONS

Senator JEPSEN. Mr. Sherick, on page 8 of your statement you list some of the actions that the Secretary of Defense has ordered to control costs. Among those is providing incentives to government employees to pursue cost savings.

How are current employee evaluations structured to provide disincentives for government employees to cut costs at the expense of other considerations such as expediency?

Mr. SHERICK. I believe we were overemphasizing the timeliness aspect of employee performance and that we needed to definitely address the natural tendency of defense organizations to excessively focus on this factor. This has been done. The Secretary of Defense's memorandum of August 28, 1983, specifically requires the services and Defense Agencies to revise performance evaluation factors to include a balanced emphasis on competition, pricing and related matters.

PROCUREMENT OFFICER TRAINING

Senator JEPSEN. Mr. Sherick, what improvements in procurement officer training do you recommend to insure that they can better utilize the Federal Supply System and other means to achieve savings?

Mr. SHERICK. DOD has recognized the need for procurement officer training and has outlined a program designed to improve the capabilities of the procurement officer. DOD Manual 1430.10-M-1 identifies training courses for acquisition personnel to provide basic skills and information needed for employment in the career field. The courses are selected and approved by the Defense Contracting and Acquisition Career Management Board which assists the Office of the Under Secretary of Defense for Research and Engineering in carrying out the responsibilities for the operation of the career program. Our office has recently completed an audit of the training program outlined in DOD Manual 1430.10-M-1 and is in the process of issuing our report. We have identified training shortfalls and have made recommendations to reduce these shortfalls and meet the training needs of DOD procurement personnel. In addition, the Services and Defense Logistics Agency should incorporate in the basic orientation of contracting personnel, an understanding of the operation of the Federal Supply System and familiarization of DOD Directives that require use of the System. DOD Directive 4140.40, "Provisioning of End Items of Material" requires DOD activities to fill requirements for items already in the Federal Supply System from existing stocks whenever possible. DOD Instruction 4140.14 establishes policies and procedures governing the local purchase of material by DOD from Federal Supply

Schedules or the National Buying Program of the General Services Administration.

IMPEDIMENTS TO USE OF BREAKOUT PROGRAM

Senator JEPSEN. Mr. Sherick, what conditions exist in the current system that prevent the U.S. Government from more effectively utilizing the spare parts breakout program?

Mr. SHERICK. Three existing conditions prevent the U.S. Government from more effectively using the spare parts breakout program.

Lack of technically qualified personnel (engineers).

Lack of adequate technical data, even though much of the missing data had been ordered from contractors and paid for.

Inadequate management and use of available technical data, and the lack of Government rights to use the data.

These conditions have been addressed in recent audit reports published by the Office of the Assistant Inspector General for Auditing. Management response to our reports demonstrates that affirmative actions are being taken to break items out for competition. Specifically:

Within the Air Force, the breakout and competition advocacy programs have been linked together and the process of staffing these offices with technically qualified personnel has begun.

On June 1, 1983, a newly developed Replenishment Parts Breakout Program was published as Defense Acquisition Regulation Supplement No. 6. Implementation of the procedures outlined in this supplement should significantly enhance the effectiveness of breakout.

In response to our Report No. 83-098 on the Management of Technical Data and its Use in Competitive Procurement, the OUSDR&E, Assistant Deputy Under Secretary of Defense for Production indicated:

"One of the major problems associated with technical data availability is current fragmentation of repositories and the antiquation of repository operations. There is at present an ongoing tri-Service effort in conjunction with the Joint Committee on Printing to provide major improvements in DOD technical data repositories. The outgrowth of this effort will be centralized, fully-automated repositories (the initial acquisition phase is in process) with major improvements in the areas of data receipt, inventory, inspection, rights of data identification/challenge of proprietary rights, storage and retrieval, timely provision of data to the user, and, most important, a composite listing of the technical data currently held and the location of holding repository. Additionally, when fully implemented, the user of technical data will be able to request and receive desired technical data from the repository via telecommunications."

In summary, we have identified what we believe are the major impediments to the effective use of the breakout program and DOD management has initiated action to address and correct the conditions.

SUBCONTRACTORS

Senator JEPSEN. Mr. Sherick, is there evidence of stifling of subcontractors under the breakout program by the prime contractors? If so, how does this occur?

Mr. SHERICK. I have heard this argument but have no evidence of prime contractors discouraging their subcontractors from dealing directly with the Government. I have little doubt that subcontractors consider the prime contractor reaction in their decision on whether or not to deal directly with the Government. At least one official from the Small Business Administration has indicated that this is a problem. He said that when he located a small business that is a vendor to an end item manufacturer and asked that business to deal directly with the Government, the response reflected fear of being cut off from future business with the end item manufacturer. If stifling occurs, it's probably the result of this kind of situation.

QUESTIONS SUBMITTED BY SENATOR SAM NUNN, ANSWERS SUPPLIED BY
MR. JOSEPH H. SHERICK

SPARE PARTS REQUIREMENTS

Senator NUNN. Mr. Sherick, I think any discussion of the spare parts issue in the military services has to begin with a discussion of the requirements.

From our vantage point, it appears that both the requirements and funding for aircraft spare parts is increasing out of proportion to reality.

Let me give an example. In the Air Force, in three years, from fiscal year 1981 to fiscal year 1984, the requirement for aircraft peacetime operating spares increased by 80 percent (\$3.2 billion to \$5.8 billion). Funding increased by 114 percent (\$2.3 billion to \$4.5 billion).

During the same period, the Air Force's aircraft inventory increased by 3.9 percent. The Air Force's flying hour program increased by 11.9 percent.

As you know, Mr. Sherick, once we set a requirement for a particular spare part, often we buy until we fill the requirement.

Are you doing any audits to determine why the requirements for spare parts are growing so much faster than the inventory or operating levels?

Is anyone in DOD asking this question?

Mr. SHERICK. Regarding the perceived disproportionate increase in requirements for aircraft operating spares, Air Force officials attribute this condition to the change in the mix of aircraft in the inventory during this period. While the total aircraft inventory may not have increased significantly, the Air Force has introduced a large number of new aircraft which are replacing those which have been fielded for many years. The pipeline of spare parts for those older aircraft is relatively stable and is being maintained at appropriate levels. Requirements for these spares should be for normal operating stocks. On the other hand, the pipeline of spares for the aircraft that have been recently fielded is not so stable. As flying hours for these aircraft increase, actual demand experience (as opposed to engineering estimates) is being generated on these spares. In effect, the pipeline of spare parts for these new aircraft was being established and filled during this time frame. My office has not conducted any specific audits or other reviews to validate this assessment of the situation.

With respect to audits of aircraft spare parts, my auditors are in the process of finalizing a report on this subject at this time. The report will be published later this month. The audit is entitled "Procurement Decisions for Aircraft Spares." The scope of the audit concentrated on the FY 1982 procurement of aircraft replenishment spares. The results of the audit were issued as a draft report in May 1983. The final report will be issued in November 1983. A brief synopsis of the audit is attached for your information.

[ATTACHMENT]

OFFICE OF THE INSPECTOR GENERAL

REPORT ON THE AUDIT OF PROCUREMENT DECISIONS FOR AIRCRAFT SPARES

SYNOPSIS

The Logistics and Support Programs Division of the Office of the Assistant Inspector General for Auditing made an audit of procurement decisions for aircraft spares. The audit was made to determine how effectively the Military Departments were spending the approximately \$4 billion appropriated for procurement of aircraft replenishment spares for fiscal year 1982. We initially reviewed 201 procurement actions, valued at \$96.3 million, that were representative of the actions being processed early in fiscal year 1982 by the activities we visited. These actions represented about 2.4 percent of the fiscal year 1982 funds appropriated for these spares. We concluded that the potential expenditures were not needed on 52 procurements, valued at \$4.8 million, which was 5 percent of the value of the 201 procurements reviewed. Most of the expenditures could have been avoided if requirements had been validated prior to contract award. We also examined another 59 completed or potential procurement actions, valued at \$22.9 million, that were known to contain the same characteristics as other procurements that were found to be unnecessary. We concluded that the potential expenditures on 41 of these additional actions valued at about \$4 million were not needed. During the audit, the Air Force informed us that it would cancel outstanding purchase requests valued at \$2.0 million and the Navy and Air Force agreed to cancel contracts worth \$143,000. The Army was contributing to an in-

efficient procurement process by not processing procurement actions to the point of award before anticipated funding was received and by not awarding contracts within administrative lead times. The Army did not respond to the draft report within 75 days from the report issue date. Management comments from the Deputy Assistant Secretary of Defense (Logistics and Materiel Management) and the Departments of the Navy and Air Force were generally responsive to recommendations concerning issuance of policy guidance and changes to automated logistics systems. However, the Navy and Air Force comments to some recommendations were not fully responsive. The Air Force also deferred action on our recommendation to use parts from deactivated F-106 aircraft to avoid new procurements, stating that a decision was pending regarding the use of F-106 aircraft as aerial target drones.

AVAILABILITY OF TECHNICAL DATA

Senator NUNN. Mr. Sherick, you made the point in your statement that one factor inhibiting the break-out of spare parts procurement is the state of technical data on the spare parts held by the military services.

A recent Air Force study found that there were almost twice as many managed parts with illegible or incomplete technical data as there were parts with proprietary data.

Which would you say is currently the greater impediment to breaking out and competing spare parts procurements—proprietary data held by contractors, or the poor quality of the technical data already owned by the government?

Mr. SHERICK. In Audit Report 83-098, "Management of Technical Data and Its Use in Competitive Procurement" which was issued in April 1983, we found that competition has been hampered by two factors. First, the Government contracted for technical data necessary for subsequent competition that was often not received from the contractor. Second, when the data was received by the Government it often was not used to break out the highest priced items from the end item supplier. Our audit covered six first line weapon systems, including the F-14 and F-15 aircraft.

The lack of data for items was due to a variety of causes. The terms of most of the contracts contained provisions which identified technical data as a deliverable item. However, in some contracts technical data were not separately priced line items so the billings from, and payments to, contractors could not be compared to the data actually delivered for purposes of assuring that data needed were received. In all but one weapon system, instructions regarding delivery schedules were inadequate or open ended. Thus, activities responsible for receiving the data from the contractors could not adequately administer these contracts to assure that all data were received and were of the proper quality.

The primary reason for items with adequate technical data being bought noncompetitively was a lack of stringent and timely breakout reviews by program manager offices. Items were coded early in their life to be bought noncompetitively, and these codes were not subsequently challenged. The codes were often assigned before technical data were received, and the items were still in the development stage and, at that point, the design was still subject to change. In those early years, there was sufficient reason to be buying unique parts from the original source. However, these items should have been marked for further review of their procurement method as these conditions changed.

On the other hand, we found some very positive things in the use and management of technical data. Specifically, we did not see funds being spent for unneeded data. Also, we did not find that rights to data were a major problem on the items reviewed. Thus, we believe that the Department can substantially increase competitive procurement, without any changes in the laws or contract clauses that deal with rights to data. Because we only looked at a relatively few high value items, we are not prepared to say categorically that the Government does not have any problems with rights to use technical data. In fact, conversations with managers indicated that we do. They insist that procurement of a large number of the high value items has been impeded by data rights problems. Our finding does not mean that the Department should abandon efforts to limit proprietary rights to specified periods on future contracts or to seek removal of proprietary data restrictions for systems purchased decades ago.

A brief synopsis of the results of the audit is attached for your information.

[ATTACHMENT]

OFFICE OF THE INSPECTOR GENERAL

REPORT ON THE AUDIT OF MANAGEMENT OF TECHNICAL DATA AND ITS USE IN COMPETITIVE PROCUREMENT

Report No. 83-098

SYNOPSIS

The Systems and Logistics Audits Division of the Office of the Assistant Inspector General for Auditing evaluated the management and use of the engineering drawings and other technical data that describe the individual items in the DOD supply system. These data are a prerequisite to being able to buy most items competitively. Technical data in DOD's possession too often were not being used to solicit competition. We estimated that \$2 million could have been saved annually in buying 18 high-value items in our sample if available technical data had been used to obtain competition. In addition, technical data on another 41 items examined had been procured but were not available in DOD for use in competitive buying. DOD planned to spend about \$39 million per year to buy these 41 items, and, by DOD's own estimate, 25 percent could be saved on any of them that could be bought competitively. DOD activities had insufficient documented basis for their noncompetitive procurement of most of the high-value items examined, and the Air Force was incurring some unnecessary duplication in its management and storage of technical data. The Deputy Under Secretary of Defense (Acquisition Management), OUSDR&E concurred with most of the recommendations to OSD. Modifications in wording in the final report should satisfy the concerns that caused the nonconcurrences. The Department of the Army and Navy concurred with most of the recommendations to them but the indicated corrective actions were not all adequate. The Air Force nonconcurred with the recommendation that it close its central data repository. The Air Force response was received too late for adequate evaluation before the final report was published. We are asking for additional comments regarding the reworded recommendations, the specific actions to be taken and when, and reconsideration of one nonconcurrence. The Air Force comments on the draft will be evaluated along with the comments to the final report.

COMPETITION ADVOCATES

Senator NUNN. Mr. Sherick, one recent DOD Initiative on spare parts procurement has been to establish a Competition Advocate's Office at major procurement centers.

These offices, as I understand them, exist to help procurement officers challenge excessive prices and to encourage competition. But these offices are not directly involved in the procurement function.

If the procurement function themselves are understaffed, why are we setting up another off-line office to give them more advice?

Wouldn't the personnel resources in the Competition Advocate Offices be better spent if they were integrated directly into the procurement function, bringing down the number of items and production quotas for which each procurement official is responsible?

Mr. SHERICK. We believe the Competition Advocate's, (CA), role and place in the organization needs to be "off-line" and reporting to the activity commander to assure it receives the proper resources and management support. Adding, in one unit, the proper technical expertise to authoritatively question and pursue items for competitive breakout seems to us to be the best answer. Adding more staff to the existing organization which has been charged to do this in the past will probably continue to conduct business as usual. At least in the beginning, a special unit is necessary.

Contracting officers previously were often unable to provide those challenges to sole source because of a lack of technical expertise or available resources. The functions performed by the CA should reduce the amount of workload the contracting offices are required to perform. Consolidating the number of buys per year, and increasing the work force by hiring more buyers would also help reduce workload imbalances and help attain competition on a higher percentage of Defense purchases.

MARKUP ON PRICING

Senator NUNN. Mr. Sherick, the recent draft IG report on aircraft engine spares noted that "DOD pays a premium when the prime contractor buys spares for the Government."

A recent Air Force study found one contractor marking up items purchased for the Government through subcontractors by as much as 250 percent.

Does the Government get anything—quality assurance, warranties—in return for these markups, or is it just a way for large contractors to spread their overhead costs?

Mr. SHERICK. The Government receives the same quality assurance and warranties on spares bought for the Government by the prime contractor as it does on the parts manufactured by the prime contractor. It is presumed, however, that the source vendor, if designated a qualified bidder, would also provide the same quality assurance and warranties if the Government bought directly from that source. In actual practice the Government is receiving little from the prime contractor, even though the parts are guaranteed, that could not be obtained by buying spare parts directly from source manufacturers. When buying parts from the prime contractor that are made by another source, overhead, labor costs and profit are normally added to the price of the spare part by the prime contractor.

SPARE PARTS CONTRACTORS

Senator NUNN. Mr. Sherick, one of Secretary Weinberger's 10 Points on Spare Parts Procurement announced in July was that the Defense Department would cease doing business with those contractors who are guilty of unjustified and excessive pricing and who refuse to refund any improper overcharges.

How many contractors fall into this category? How many spare parts contractors have actually been debarred from doing business with the Government in the last 12 months?

How many have voluntarily refunded money to the Government when asked?

Mr. SHERICK. The Department of Defense deals with an extremely large number of spare parts contractors annually. Contracts are negotiated at the local agency/command level. Charges of unjustified or excessive pricing are reviewed and resolved at the local agency/command level. There is no requirement to report these instances to a central information point unless action is taken to debar or suspend a contractor. Therefore, the Department of Defense would only have information on those contractors that have been judged guilty of unjustified and excessive pricing and have been debarred or suspended.

Within the last 12 months no spare parts contractors have been debarred or suspended solely for unjustified and excessive pricing or for refusing to refund any improper overcharges. However, current data does show that spare parts contractors have been debarred or suspended on charges such as false claims, product substitution and bid rigging.

At this time there is no requirement to accumulate contractor refund information. However, available data shows that 12 companies have refunded \$382,504.

QUESTION SUBMITTED BY SENATOR SAM NUNN, ANSWER SUPPLIED BY
MR. WARREN G. REED

STAFFING OF PROCUREMENT FUNCTIONS

Senator NUNN. Mr. Reed, I certainly agree with your conclusion that "even the most modern computers and software cannot substitute for effective buyer practices."

In your opinion, do the procurement functions in DOD have enough people assigned to carry out their workload efficiently?

Mr. REED. During our review we did not specifically address the question of enough people assigned to carry out the work. However, I want to add that there are a number of audits on-going in GAO that do address this question. I will make every effort to see that the committee gets copies of these reports.

QUESTIONS SUBMITTED BY SENATOR CARL LEVIN, ANSWERS SUPPLIED BY
MR. WARREN G. REED

Senator LEVIN. Mr. Reed, you state in your testimony that you did not find Competition Advocates in place for all of the services. Will you provide for the record the buying commands you examined and point out those which did not have competition advocates in place?

Mr. REED. We visited the Air Force's San Antonio Air Logistics Center in Texas, the Navy's Aviation Supply Office and the Defense Logistics Industrial Supply Center, both in Philadelphia, and the Army's Aviation Material Readiness Command in St. Louis.

Early in our work at the Navy's Aviation Supply Office, we were told there was no competition advocate. Later, we learned that a competition advocate had been appointed this spring. This action was in response to a memo from the Naval Supply System Command which directed that a competition advocate be appointed and the Command advised as to what the advocate would do. As of November 2, the role, duties and responsibilities of the competition advocate for the Aviation Supply Office have not yet been formalized and approved by Navy headquarters. We believe that because this action has not yet been completed, it is not apparent to Aviation Supply Office activities and functions that there is a competition advocate.

At the time we completed our field work at the Army's Aviation Material Readiness Command in St. Louis, no competition advocate had been appointed. In a message to all subordinate commands dated September 21, 1983, DARCOM directed that the Deputy Commanding General for Procurement and Readiness be appointed as the major subordinate command competition advocate if not already designated as such. This office is currently identifying the role, duties and responsibilities of the competition advocate and expects it to be operational in a few months.

QUESTIONS SUBMITTED BY SENATOR JEFF BINGAMAN

SPECIFIC ACTIONS TAKEN WITHIN LAST THREE MONTHS

Senator BINGAMAN. For each item in Secretary Weinberger's memorandum of July 25, could you detail the specific actions taken in the past 3 months to follow-up. How many people have been rewarded? How many disciplined, etc.? I would appreciate as specific a response as possible.

Mr. SHERICK. Listed below are each of the ten points (paraphrased) in the Secretary of Defense's memorandum of July 25, 1983, Spare Parts Procurement, followed by specific actions taken by the Military Departments and the Defense Logistics Agency (DLA) to the extent the information is available.

First. Employee incentives/rewards for cost savings.

Army: Information on awards is not available.

Navy: Five employees have received monetary awards.

Air Force: Seventy-five employees have received monetary awards in fiscal year 1983.

DLA: Thirty-two employees have received monetary awards.

Second. Disciplinary action for employees who are negligent.

Army, Air Force, DLA: Direction has been issued to field commands.

Navy: Disciplinary action was taken as a result of poor procurement practices at the Naval Training and Education Center including a letter of reprimand to a GS-15, the reassignment of a Navy Commander, and a letter of caution issued to a former commanding officer.

Third. Direction to Deputy Secretary Thayer to work with Service Secretaries and to alert defense contractors to the seriousness of the problem.

The Deputy Secretary of Defense has met with the Service Secretaries and top officials of industry and industry associations. In addition, Deputy Secretary Thayer, as Chairman of the Defense Council on Integrity and Management Improvement, is providing oversight and coordinating efforts to reform the acquisition of spare parts. As further examples of action taken to acquaint contractors of the seriousness of the problem, the Army sent letters to about 125 contractors and the Air Force sent letters to 35 contractors. The Navy and DLA have made a point of raising this matter in meetings and discussions with industry.

Fourth. Competition advocates should challenge noncompetitive orders and items that appear to be excessively priced.

Competition advocates have been designated at approximately 270 buying activities. They are daily focusing on factors that inhibit competition and seeking ways to overcome these inhibiting factors.

Fifth. Refuse to pay unjustified prices and assure price reasonableness.

Army: Approximately 23,000 items were analyzed through sampling techniques to ascertain the validity of price increases greater than 25 percent. Some cases of less than \$25,000 in value indicated questionable prices and they are being challenged. Currently all price increases greater than 25 percent in a 12-month period are being reviewed for validity. The Army has also initiated its Sprint Program (Spare Parts Review Initiatives) with a wide range of initiatives to improve spare parts acquisition.

Navy: Chief of Naval Material has instituted a multifaceted program called BOSS (Buy Our Spare Parts Smart) with over 70 initiatives to improve the procurement of spare parts.

Air Force: A task force, the Air Force Management Analysis Group, was established to examine spare parts procurement. They have made over 150 recommendations to improve the procurement of spare parts. Among initiatives taken are item review procedures so that buyers will have some ideas of what the item should cost and publication of price awareness letters.

DLA: Defense Contract Administration activities have been directed to validate contractor cost allocation systems and spare parts support costs to insure unit price integrity and cost-to-intrinsic value comparisons are reasonable.

Further, as required by Section 1215 of the DOD Authorization Act of 1984, procedures have been prepared setting forth certain limitations on the purchase of spare parts or replacement equipment. The procedures are designed to flag price increases and require certification, where threshold is breached, that the price is fair and reasonable or the national security interest requires the purchase.

Sixth. Reform contract procedures and phaseout price redeterminable provisions in basic ordering agreements.

The Military Departments and DLA have all taken action to phase out use of price redeterminable features in basic ordering agreements. Spare parts will be priced up front. Continued improvement of contract procedures is an ongoing matter. A single federal procurement regulation has been issued called the Federal Acquisition Regulation which is effective April 1984. Follow-up of the DOD Acquisition Improvement Program (Carlucci 32 Initiatives) continues. Implementation of the guidance developed under E.O. 12352 Federal Procurement Reforms is in process. Collectively there is considerable activity to improve acquisition.

Seventh. Obtain refunds where DOD has been overcharged.

Army: Two refunds have been obtained.

Navy: Six refunds have been obtained.

Air Force: Nine refunds have been obtained.

DLA: Eight refunds have been obtained. Item pricing is continually under review and refunds are sought by all DOD Components where charges are excessive.

Eighth. Seek alternate sources of supply where prices are unjustified and cease doing business with those contractors guilty of excessive pricing.

Army: As an example, the Army refused to award a contract for antitank weapons because the contractor would not accept a firm fixed-price contract.

Navy: As an example, the Naval Supply Center and the Naval Electronic Systems Engineering Center, Charleston, developed a competitive specification for a monitoring system that was previously sole source. The resultant competitive award was made to small business at a savings of \$2.7 million.

Air Force: The Air Force has initiated 51 debarments or suspensions as compared to 12 the previous year.

DLA: In 1983 DLA pursued several investigations and indictments. As examples, at one DLA procurement center, 4 companies were debarred/suspended for furnishing substandard parts. In another center one contractor was held liable for prices and reimbursements of overcharges amounting to \$3 million.

Ninth. Audits and investigations of spare parts will continue.

Audits and investigations are ongoing. The findings and reports will be utilized to improve the acquisition of spare parts.

The DOD wide audit of the procurement of spare parts is of particular significance. The report on this audit will be issued in two parts; the interim report will be issued on February 28, 1984, and the final report will be issued on April 14, 1984.

Tenth: It is our responsibility to insure that we do not waste one dollar of the taxpayers money.

We are taking aggressive action to reform the management and acquisition of spare parts as reflected in the comments above.

Chairman Tower. The hearing is recessed until 2 o'clock this afternoon.

[Whereupon, at 12 noon, the committee recessed, to reconvene at 2 p.m., the same day.]

AFTERNOON SESSION

The committee met in open session, pursuant to notice, at 2 p.m., in room SR-222, Russell Senate Office Building, Senator John Tower (chairman) presiding.

Present: Senators Tower, Thurmond, Warner, Quayle, Nunn, and Levin.

Staff present: James F. McGovern, staff director and chief counsel; Alan R. Yuspeh, general counsel; Paul C. Besozzi, minority counsel; Brenda K. Hudson, assistant chief clerk; Louis W. Arny III, David S. Lyles, José E. Martinez, Patrick L. Renahan, and Carl M. Smith, professional staff members; and Tamara L. Farnsworth, staff assistant.

Also present: Dennis P. Sharon, assistant to Senator Goldwater; John Campbell, assistant to Senator Warner; Karl Stegenga, assistant to Senator Quayle; Jon Etherton, assistant to Senator Jepsen; Mark J. Albrecht, assistant to Senator Wilson; Larry Seigel and Jeff Minsky, assistants to Senator Cohen; Arnold L. Punaro, assistant to Senator Nunn; and Ralph White, assistant to Senator Levin.

OPENING STATEMENT BY SENATOR JOHN TOWER, CHAIRMAN

Chairman TOWER. The committee will come to order.

This afternoon the committee meets to continue to receive testimony on the issue of spare parts procurement for the Department of Defense.

This morning we heard from the Department of Defense Inspector General and the General Accounting Office, and this afternoon we will hear from the Office of the Secretary of Defense.

The committee is pleased to welcome Hon. Paul Thayer, the Deputy Secretary of Defense, and Dr. James Wade, the Principal Deputy Under Secretary of Defense for Research and Engineering.

While we recognize that the purpose of your appearance this afternoon is to discuss the spare parts issue, there are two other major procurement matters in which this committee has an interest.

First, I understand that an amendment requiring a warranty from the manufacturer of all weapons systems with respect to both design and performance has been adopted by the Defense Appropriations Subcommittee.

Our committee has requested the views of the Department on this matter through your General Counsel. Because of the timeframe in which this legislation will be considered by the Senate, it is necessary that we have the Department's views by this Friday. I would appreciate your expediting the dispatch of those views.

In addition, I understand that you have an interest in the reauthorization of the Office of Federal Procurement Policy and granting regulatory authority to that office. You are welcome to take this opportunity to comment on that legislation as well.

We are glad to have you, Mr. Secretary. You may proceed as you see fit.

STATEMENT OF HON. PAUL THAYER, DEPUTY SECRETARY OF DEFENSE, ACCOMPANIED BY JAMES WADE, PRINCIPAL DEPUTY UNDER SECRETARY OF DEFENSE FOR RESEARCH AND ENGINEERING

Mr. THAYER. Thank you, Mr. Chairman and members of the committee.

I do welcome the opportunity to discuss with you our program to strengthen our spare parts procurement. I will, Mr. Chairman, cover the other two items that you mentioned.

I think that you will agree that we have made some noteworthy progress in controlling a problem that has clearly frustrated defense leaders for far too long.

Those of you who remember the Pike hearings in the 1960's and Hébert hearings in the 1970's know that the overpricing of spare parts has also concerned Members of Congress for a long time. I am here today to tell you why I think we will solve that persistent problem.

Frequently forgotten, we did take the initiative before my watch, without external prodding, to investigate the problems with spare parts procurement.

We are making systemic changes to our defense procurement process to institutionalize the solution to the problems we discovered.

The President and the current leadership of the Pentagon—including Secretary Weinberger, myself and the three service Secretaries—have all declared their commitment to make those solutions work, and back that commitment with deeds.

Shortly after arriving at the Pentagon, Secretary Weinberger established a new post for an Assistant for Review and Oversight to direct the work of the Defense Department's auditors and investigators. To handle that important and difficult mission, Secretary Weinberger appointed Mr. Joseph Sherick, the current DOD Inspector General who testified before this committee this morning. As one of Mr. Sherick's first tasks, Secretary Weinberger charged him to investigate our spare parts operations.

Since March 1981, our auditors and investigators have been reviewing our spare parts accounts to determine the cause of overpricing. In an agency with an inventory of almost 4 million items, that is a prodigious task. But our investigations, with the help of some alert DOD employees, have now surfaced the problems so we can work to correct them. Unfortunately, our own findings have also been the source of virtually every one of the horror stories in the press, although the Defense Department is rarely given credit for uncovering the problems.

This morning Mr. Sherick testified before this committee concerning the findings of his audits of pricing of aircraft engine spare parts. The causes of overpricing that he found range from basic ordering agreements that permit contractors to set prices long after we have placed orders, to insufficient competition, to the simple fact that our supply and purchasing clerks are unfamiliar with items they are ordering and, therefore, do not know whether prices are reasonable.

Rather than repeat Mr. Sherick's discussion of the causes of spare parts overpricing, today I want to focus on our solutions to the problem.

When Secretary Weinberger testified before this committee in July, he discussed the 10-point program to reform spare parts procurement that he just enacted. Since then, that program has had a significant impact throughout the Defense Department and within our defense industries.

I would like to take a few minutes to describe briefly for you some of the early results of the program and some of the longer term initiatives that it has set in motion.

Point 1 of our program calls for incentives for our employees to find cost savings. We have been spreading the word to all our employees that attention to prices pays off. For example, the Air Force rewarded a sergeant with a bonus of \$1,100 for discovering a grossly overpriced spare.

Point 2 of our program calls for us to take stern disciplinary action against employees who allow procurement abuses to continue. Our DOD managers tell me that the word is out that we are serious about upholding the high standards we have set.

Point 3 requires that we impress the seriousness of our concern to industry leaders. Secretary Weinberger and I have been carrying that message to the defense industry in speeches and private meetings.

When you meet with representatives from industry, I think you will find that the message is getting through. Let me read to you from a memo written by Lockheed President Larry Kitchen to his staff:

Defense Secretary Weinberger has issued a memorandum, dated 25 July 1983, in which he sets forth ten precepts to govern military procurement of spare parts. The Secretary has requested industry's assistance to assure that future pricing 'abuses' are avoided. He will have our assurance . . .

Point 4 of our program calls on the services to expand competition in the purchase of spare parts. Now the services are creating independent offices, called competition advocates, in their buying commands and giving them the power to challenge all noncompetitive contracts.

Point 5 in our program calls for phasing out basic ordering agreements that allow manufacturers to set prices for repeat orders of spare parts. Within 2 weeks after the program was announced, the Secretary of the Army canceled all authority to order parts where manufacturers had the right to adjust the price after the order is placed.

Point 6 of our program directs the reform of our contracting procedures to encourage competition and preclude overpricing. The request for bids on a new jet engine that the Air Force is offering for competition requires, for the first time, provisions to insure future competition for engine spares. If bidders can't show how they will provide that competition for spares, they will jeopardize their chances of doing business with the Defense Department.

Point 7 of our program directs the services to seek refunds for past overcharges, and they have been doing just that.

Point 8 of our program requires that the services develop alternate sources so we can cease doing business with contractors who refuse to meet our more demanding contracting standards. Recently the Army notified the only American competitor for an antitank weapon that the company was being dropped from consideration because it refused to meet the Army's requirement for a firm fixed-price contract.

Point 9 of our program calls for continued audits. As the Inspector General testified his staff has begun a full audit of all types of spares throughout every agency in the Defense Department.

The final point of our program addresses our responsibility to the many fine corporations and dedicated DOD employees who have been supporting our Nation's defenses faithfully for years, and who have been unfairly maligned by the recent spare parts horror stories.

To them, and to the American taxpayer, we feel a strong personal obligation to insure that we permanently correct the spare parts situation we face. On August 29 Secretary Weinberger issued a directive with specific milestones to modify the entire spare parts acquisition process. And he designated me, as Chairman of the Defense Council on Integrity and Management Improvement, to coordinate those changes. Let me briefly explain some of the most significant changes we envision.

We are requiring, for all weapon systems and equipment acquisition, that our contracting officers adhere to the DOD parts control program which promotes use of standard parts throughout the entire system acquisition cycle from engineering design through production.

Since only about 40 percent of all weapon system contracts currently employ parts control, we are making an engineering review of non-standard parts and recommending replacements with standard items. Increased use of standard parts will not only improve logistics support, but also promote competition since nonstandard parts are more frequently purchased by sole source contracting.

We have also challenged our engineers to help determine if spares are overpriced. We will then apply value engineering to develop more cost-effective alternative solutions where the costs or prices of spare parts exceed their intrinsic value.

Where technical data required to seek competition is encumbered by proprietary restrictions, we plan to challenge defense contractors to support their right to withhold that data. Where we do have the rights to data, we are improving our automated systems to assure that we can quickly retrieve it when we need it and keep it up to date.

To improve spares competition in new programs, we have issued a revised regulation (DAR Supplement No. 6), dealing with breakout of spare parts. It provides procedures for breaking away replenishment spare parts from weapon systems contractors and buying them competitively or from the actual manufacturer. The regulation substantially improves on the previous directives by providing for:

- Participation by representatives of the Small Business Administration in breakout screening conferences;

- Designating a breakout manager at major buying activities to monitor the program;

- No longer permitting the design contractor to recommend the method of procurement;

- Requiring design contractors to provide technical information on spares and identify their suppliers; and,

- Challenging restricted source designations.

None of our changes are easy; nor are they without cost. I have been meeting with the Secretaries of the Military Departments to stress that they will have to devote additional personnel and funds to implement our program.

They will also find in some cases that near-term readiness will suffer as they take the added time and expense to screen spare parts orders for competition and correct pricing.

The response of the Services has been positive. All are developing implementation plans. An Air Force management analysis group, which has been examining spares procurement, is about to issue a report recommending over 150 changes in Air Force policies and procedures. The Army and Navy are taking similar actions.

We have also presented our plans and intended changes to representatives from industry. Their reaction has been generally very supportive. In some cases we will be complicating the process by which they do business with the Defense Department. That is an inevitable result of changing longstanding procedures.

But essentially all leaders of defense industries recognize that it is in their best interest as well as ours to correct problems that damage the reputation of the entire industry.

Congress also has a role in helping to create a lasting solution to spare parts problems. For example, we can enhance competition by emphasizing second sourcing, but we need your support for our legislative initiative to authorize the Defense Department to negotiate for alternative sources of supply. We recognize that dual sourcing at the prime-contractor level during the production phase of a major system is not a panacea for reducing costs, and we are trying to determine just when the extra investment for dual sourcing is justified.

Congress also needs to recognize the up-front investments associated with changing a well-entrenched, but inefficient process. Personnel must be diverted from other tasks to screen hundreds of thousands of items, automated systems must be updated, technical data packages must be purchased.

The most significant changes will only take effect over a period of several years. But when they do, the savings will be substantial. Until then, we ask for your support and commitment to our long-overdue and worthwhile reforms.

I would like to switch the subject, if I may, to the other two items you mentioned, Mr. Chairman.

First, warranties on weapon systems. The general provision, which would require that all weapon systems must have a written guarantee from the prime contractor covering all performance requirements or that waivers would be required from the Secretary of Defense, presents several problems for the Department.

First, it should be clearly understood that warranties, even when applied to commercial items, cost money which is explicitly identified or included in the price of the end item. For this reason, we make sure it is worthwhile when we use warranties.

Second, warranties are generally applied selectively, usually to a subsystem or component, and then only for a particular parameter, for the durability of an aircraft engine, for example. Rarely are they applied to a complete system, even in a commercial application.

We believe the universal application of warranties as contemplated would increase the cost of our programs to an unacceptable level.

DOD supports the use of warranties when they make good business sense. We use some form of warranty on about one-third of our purchases. Warranties are an important tool and we believe it is important that we have the flexibility to apply or not apply warranties on a case-by-case basis.

The proposed amendment is neither practical nor wise. It would cause defense costs to rise unnecessarily and it would create a huge analysis and reporting system to process waivers for every weapon system for which warranties did not make sense.

We have further difficulties. The language appears to be retroactive to all existing production contracts and would apply for the life of the weapon system.

Finally, before concluding, I want to alert this committee to an issue that can seriously disrupt the progress of our spare parts procurement reform and, indeed, of our entire acquisition improvement program.

The proposal to give regulatory authority to the Office of Federal Procurement Policy (OFPP) would insert a new bureaucracy in the defense acquisition process just at the time when reforms have progressed from the policy to the execution stage.

At the very least, it would halt the reforms until the OFPP could study and improve our program policies. It would undermine the entire DOD acquisition management program, with a new agency trying to regulate a complex Federal acquisition process that it has neither the experience nor the staff to handle.

Besides the obvious management drawbacks, the proposal jeopardizes the Defense Department's ability to meet the military threat, execute, military strategy and preserve defense. That is the statutory responsibility of the Secretary of Defense.

This proposal dilutes the Secretary's responsibility and makes it impossible to hold him accountable to meet our national security requirements. In a similar fashion it dilutes the authority of this committee to maintain oversight over our defense program.

I ask this committee then to consider carefully the consequences of the proposal to give regulatory authority to the OFPP.

That, Mr. Chairman, concludes my formal remarks. I have not only Dr. James Wade, but I have representatives behind me from the Defense Logistics Agency (DLA), from all three services, and I would hope that with this team we will be able to respond completely to any of your questions. If not, we certainly will submit them in writing in very short order.

Chairman Tower. Thank you, Mr. Secretary.

Did you want your associates to make comments or shall we proceed to questions?

Mr. THAYER. I think we might proceed to questions.

Chairman Tower. Mr. Thayer, this morning GAO testified that apparently the principal problem is the fact that although there seems to be underway a modernization program of computer hardware in the military services, that apparently the software is not available, is not being designed that would help do the job of ferreting out these spare parts cost distortions.

Will you comment on that? What is the Department doing about it?

Mr. THAYER. First, Mr. Chairman, we are well aware of our shortcomings in this area. Unfortunately, over the years this has been an area that has been neglected very seriously.

We are operating, in certain very key supply areas in particular, with less than modern equipment. Software is one of the problems. It is my distinct impression that it is not a problem that we can cor-

rect overnight; it will take some time to do it and it is going to require more money than we originally estimated.

Chairman TOWER. Admiral Grinstead, would you care to make any comments in this area?

Admiral GRINSTEAD. In DLA, sir, equipment-wise we are in good shape. Our problem is the software application systems and we are working on them.

Chairman TOWER. Let me ask why it is necessary for each service to have its own separate software?

Mr. THAYER. I don't know that I can answer that.

Could you answer that Admiral Grinstead?

Chairman TOWER. Admiral, why don't you come up to the table.

Admiral GRINSTEAD. Mr. Chairman, all the services and agencies have different hardware, different executive routines, different application programs and different data base systems. If you embarked on standardization of the systems, I think we are talking at least the lifetime for one, if not all of us. That is my opinion if we attempted to standardize them.

I think standardizing the rules and checkpoints might be one thing we could do. If you tried to put a common software system in, I don't think you could get there in 10 years.

Chairman TOWER. Mr. Thayer, this morning the IG offered the opinion that we are undermanned throughout the acquisition system.

What efforts are underway to correct the undermanning in the acquisition system?

Mr. THAYER. We are putting an additional workload on our logistics organizations, for example, adding breakout managers and competition advocates.

We expect that in these areas, Mr. Chairman, we will use existing personnel at least for the foreseeable future. These positions could be filled by the Chief of Pricing, for example, or the Chief of Procurement. If they are unduly loaded down by these additional responsibilities, then we will seek to add the personnel required in order to get the job done.

Now, in the other areas, such as storage, retrieval, updating, and executing the new systems, where it will require initially more than the ordinary amount of effort, we are simply going to have to assign personnel to those areas from areas of lesser priority.

I think more than manpower ceilings our biggest problem will be to get qualified people. That is more important than quantity, in my opinion.

Chairman TOWER. Mr. Thayer, according to information gathered by the General Accounting Office (GAO) during the visit to DLA, certain machine bolts were ordered on five separate occasions from March to September 1983.

In March they ordered 100 at \$2.94 per unit; in May, 300 at \$2.55 per unit; in June they ordered 3 at \$17.50 a unit; in August they ordered five at \$23.53 a unit; and again in August 110 at \$3.50 a unit.

Why was it necessary to make five separate procurements in such a short time period? Wouldn't it have been more efficient to make one annual procurement of \$600?

Mr. THAYER. I would have to agree. On the surface it sounds like a lack of control at some point. That did happen in DLA, did it not, admiral?

Admiral GRINSTEAD. Yes.

Chairman TOWER. I will let the admiral answer that question.

Admiral GRINSTEAD. Mr. Chairman, looking into this item for this hearing today, I found that as this item came into the system, it was one for which nobody had the technical ability to predict the kind of usage it was going to have, or how often it was going to be needed and in what quantities.

Accordingly, the item was classified, not a demand-based item where we stock based on frequency of demand and the quantity of demand, but as a numerical stockage objective item. This basically means that either we buy a minimum quantity to try to have something to take care of an emergency or buy as demanded until you have experience before making significant stockage decisions.

In this case, as best I can tell, this item is used on M60 tanks. The first item, as you noted here, we bought to satisfy a one-time requirement for the Marine Corps in Albany, Ga.

The 300 buy was for the Anniston Army Depot. That also was a one-time buy delivered straight to Anniston. The same type case existed with the three and five quantity buys.

Now, based on computer rules, after we have three hits in a period of time, the item comes out of the computer and asks the technicians to take a look and see if he wants to make it a stocked item.

Now, after these transactions in this particular instance occurred, the machine did come out and the technician recommended that the commodity manager take action to buy and stock the item. In that way we went for the 110 buy. Now, with these rules in place you can see in this instance there is a relationship between the quantity and the price paid. Most of the items we manage would have these types of pricing differences under similar circumstances.

Until the item demand reaches a rather significant quantity and frequency we don't attempt to buy it for stock because it costs you a lot of money to bring items into the system and hold and manage them in the military warehouse. But that 110 is the buy that will come into stock.

When the 300 came in we asked Anniston what it was used for. They said it was a one-time buy, we didn't expect the demand to repeat. It did repeat. The three was a repeat from Anniston.

Chairman TOWER. What I can't understand is that one month after ordering 300 from Anniston they ordered three.

Admiral GRINSTEAD. They claimed it was for a special industrial job that they were doing on M60 tanks and they didn't expect it to repeat.

It could be that they lost three or broke three.

Chairman TOWER. My time has expired.

Senator Nunn?

Senator NUNN. Thank you very much.

First, Mr. Thayer, let me express my appreciation for the initiatives that have already been taken. I think you have at least addressed the problem. I think you have demonstrated to the Department of Defense you are serious about it.

There is a lot more to be done. I am not at all sure we have done anywhere near what we should, but at least you have made a beginning.

One item that is, I suppose, macro in one sense, but it seems to me I hear it everywhere I go about the procurement process and how complex and complicated it is.

What I am told is that every time we have identified a problem in procurement for the last 25 or 30 years there is a whole new tier of regulations that come out to deal with that problem. While that set of regulations might be appropriate, when you compile all of them and put them together the stack of regulations and rules is so high that everybody in the bureaucracy can point to the regulations and say we went through it.

But the cumulative effect of this is that the procurement process is incapable of being efficient in any sense.

I know all of us recognize we have more and more programs going black, some of which are necessary for classification purposes and some of which in my view are to get around the huge number of bureaucratic requirements.

Strangely enough, without going into detail in this hearing, some of the programs which are not subject to all the procurement regulations are among the most efficient programs we are running.

So, my question is, in devising these new rules and regulations to address the current problem, that is spare parts, are we also looking at the cumulative effect of everything we have done to determine if there is some way to slash and cut through procurement regulations to have a whole lot fewer regulations and have a lot more discretion in the bureaucracy than to hold the bureaucrats accountable for their own judgment?

It just seems to me we repeat this on a cycle. Every time a new problem comes up we address it with a whole new tier of regulations.

Let me give you one example and then I will put a question mark at the end of it and ask for comment.

Norman Augustine, former Department of Defense official and Chairman of the Defense Science Board, in a book indicates that one of the problems in the procurement process for most major weapon systems and spares is too much paperwork or too many regulations.

He gave one example. He said the required number of parts and copies of one contractor's proposal on the Army advanced helicopter improvement program exceeded the take-off weight of the helicopter.

Does that make any difference?

No matter how fine each one of those regulations is and how well intentioned it may be, the cumulative effect is to discourage both the bureaucracy dealing with the problem and people who might be potential bidders.

I don't believe you will get very many small businesses to come in and participate meaningfully in the process as long as they have such an onerous burden to deal with in acquiring information. That is just an observation.

I would welcome any comment.

Mr. THAYER. First of all, Senator Nunn, there has been some progress made in the past 2 years and the initiative started before I arrived on the scene and was well along when I checked in. That is to reduce the complexity of the procurement process and that has been done formally as of about 3 or 4 weeks ago.

It will not be mandated until April 1 of next year. But the volume of acquisition regulations will be reduced. As a matter of fact, they had a visual display, it was over 3 feet high down to something less than 1 foot high.

Frankly, I don't know how much complexity was actually taken out, but at least the written word was reduced by several hundred percent.

I think there is more that can be done in that area. There will be more activity on the administration's part to dig further into the problem. But as the Grace Committee report mentioned, and as has been mentioned before, much of the complexity of the procurement process exists because of the Congress.

In order for us to do anything substantial about reducing the complexity of the procurement process, I think we have to come to more general, rather than specific, agreements and working relationships with the Congress.

How realistic that is is for you all to decide because there is not a great deal that we can do about it, except to make recommendations.

Senator NUNN. Have you made recommendations on all the congressional impediments to an efficient procurement process?

Mr. THAYER. I don't think we have made recommendations to all of them.

Certainly one major initiative in that area is the multiyear procurement. Our batting average on that has been kind of spotty. I think this year we got 7 out of 14, although when it got over to the House Appropriations Committee that was reduced to about 4.

Senator NUNN. Of course, on some of those requests for multiyear you have not complied with the GAO's recommendations for the criteria for multiyear which is enormously important.

Mr. THAYER. I don't know that the GAO's recommendations are all that practical, if you will forgive me for saying so.

I think that the decision as to whether or not a weapon system is ready for multiyear procurement should reside primarily with the Department of Defense, the people who know the system the most and best.

For example, our recommendation for multiyear for the F-15 program has been turned down. The F-15 is one of the more well-shaken-down, operationally proven aircraft that we have in the inventory.

Senator NUNN. Let me get on to other things. I want to get back to spare parts. There have been different reasons on the multiyear because the air defense mission and validity of the air defense mission plays a large part in the multiyear. The question is overall number needed, not efficiency of procurement.

Let me ask you a couple of questions on the spares. The draft Inspector General report by the Department of Defense on aircraft engine spare parts found—

Contractors who submitted unsolicited proposals were either rejected outright or required to undergo a lengthy qualification process that was often evolved by the prime contractor.

If you are trying to get competition in the system and one of the ways you do it is to have the prime contractor, who already had a lock on the spares, do an evaluation of qualifications of a possible competitor, it seems to me on its very face an inherent impediment or conflict of interest.

Are you addressing that question?

Mr. THAYER. Yes, sir, we are. As a matter of fact, the best example of that is the ongoing fighter engine competition. In that, Senator, we are asking in our request for proposal that the engine manufacturers submit to us budgetary and planning cost estimates for the qualification of at least one additional source for the 30 highest procurement value replenishment spare parts items which should constitute about 80 percent of the total cost of the engine spares.

In other words, this will give us the option to establish two or more sources and a continuing competition for the top 30 items for as long as the engine is in production.

That will leave us the 20 percent which we can work on to negotiate rights to data, which could cost some up-front money. As appropriate, we then will set technical data packages so that a timely breakout can occur. Our efforts in the fighter engine competition will place us in an improved position to compete engine spares throughout the life of the program.

Incidentally, the warranty amendment referred to earlier would interfere with that process, as you can see. If we insist that the contractor warrant the entire engine as part of the final contract, then he would have every right to insist that he have absolute control over the parts involved.

Those are the steps that are being taken. I think they will be perfectly adequate and satisfactory to cope with the problem. I don't want to lead you to believing that what I am telling you is, in my opinion, going to take care of 100 percent of the problem because we are dealing with 3.8 million parts and we are adding to that list 5,000 to 7,000 parts a month.

So, I don't think we are ever going to get to the point where, in this very complex parts procurement process, we are going to be able to prevent a horror story again someday.

I think we will get it down to the point where it will be very hard to find a horror story, and very hard to slip by.

Senator NUNN. My time has expired, but will you furnish for the record the major congressional impediments that you see to the spare parts problem in particular?

Mr. THAYER. Yes, sir. I am not saying all of them.

Senator NUNN. Thank you.

[The information follows:]

IMPEDIMENTS

While the Department perceives improvement in the acquisition of spare parts as principally a management matter, the procurement process is complex. This complexity results from statutory as well as regulatory requirements. In early summer, the committee considered S. 338, a bill to revise the procedures for soliciting and evaluating bids and proposals for government contracts and awarding such contracts. On June 7, 1983, the Deputy Under Secretary of Defense for Research and Engineering (Acquisition Management) testified before the committee on this bill. The bill would substantially modify our basic procurement authority and contains improvements which we have been seeking. However, a number of its provisions adds further complexity to the procurement process. Our detailed report on this bill was forwarded to the chairman of the committee on June 2, 1983, with a number of recommended amendments to the bill. Favorable consideration of the bill with these amendments would significantly improve the procurement process.

Chairman TOWER. Senator Thurmond?

Senator THURMOND. Thank you, Mr. Chairman.

Mr. Secretary, we are glad to have you with us today. I have heard complimentary remarks about the work you are doing at the Pentagon and I am pleased you are in that position.

Mr. THAYER. Thank you.

Senator THURMOND. I have before me a synopsis of the Inspector General's draft report. I presume you have had this called to your attention?

Mr. THAYER. What is it, sir?

Senator THURMOND. It is a synopsis of the Department of Defense Inspector General's draft audit report.

Mr. THAYER. I don't know that I have seen that particular one.

Yes, I have it here now.

Senator THURMOND. I won't take time to go into all of these. I will just ask you about one or two.

The third one says the DOD breakout program was not effectively implemented at the buying centers. It seems that the DOD program might have been good, but it was not implemented.

Mr. THAYER. I think that is valid criticism for performance in the past. What I have attempted to describe is the actions that we are taking now. Among those actions is a great deal more activity and concentration on breakout.

Senator THURMOND. Another one is the use of price redetermination provisions. DOD has allowed contractors to raise prices without adequate monitoring of price increases or questioning significant cost growth.

I am wondering if this had been brought to your attention. Have you been briefed on it?

Mr. THAYER. Yes, sir. The BOA it speaks of here is the basic ordering agreement. That in itself is not a contract but simply an agreement. Some contained provisions that did allow pricing of the ordered item at the time of delivery, which was not a good business practice.

Redeterminable pricing under basic ordering agreements has been controlled across the board, pricing is done at the time that the contract is entered into for the part and not at the time of delivery.

Senator THURMOND. Another one says the primary element driving cost up is markup. Pratt & Whitney has no intention to control or index cost in the price of spares. I am wondering if you had been briefed on the IG report and have had a chance to go into it enough to answer?

Mr. THAYER. This is a draft report, as you pointed out. I have been briefed on the major elements of the report, but the report is not yet in final form and really has never gotten to me.

Senator THURMOND. This contains some very good points, if you would take time to read them. I think what the IG found would be very helpful because it points out things that could and should be corrected.

Mr. THAYER. In that respect, Senator, let me say that we are not waiting for the final report to be issued, but instead we have taken the initiative and have issued directives which I will be glad to provide.

I think if you take the synopsis of the Department of Defense Inspector General's draft audit report that you have, these two pages,

and look through this memorandum which has been formally issued, you will find that essentially all of these criticisms that are valid have been responded to and corrective action has been initiated.

Senator THURMOND. Corrective action has been taken on these various points?

Mr. THAYER. Yes, sir.

[The information follows:]

SPARE PARTS INITIATIVES

The attached memorandum of the Secretary of Defense, dated August 29, 1983, Subject: Spare Parts Acquisition, sets forth the initiatives we have taken in this matter.

THE SECRETARY OF DEFENSE,
Washington, D.C., August 29, 1983.

Memorandum for Secretaries of the Military Departments; Chairman of the Joint Chiefs of Staff; Under Secretaries of Defense; Assistant Secretaries of Defense; General Counsel; Inspector General; Assistants to the Secretary of Defense; and Directors of the Defense Agencies.
Subject: Spare Parts Acquisition.

My memorandum of July 25, 1983, announced a ten point program on spare parts procurement. Procurement, however, is but one facet of the problem. While the focus of immediate attention, other aspects of the spare parts total acquisition process must get equal scrutiny. Improvement in all areas is essential. While this memorandum deals primarily with acquisition, attention next will be focused on the requirements process, the authorization and appropriation process, and the way we manage readiness and support.

I am resolved that the Department of Defense act decisively. Nothing short of our full management capability and technical expertise must be applied to this challenge. Our credibility before the Congress and the public is at stake. Accordingly, I am now directing the additional actions set forth below.

In some cases I have designated precise milestone dates. This is addressed in the enclosure, as is further discussion of selected actions. I am asking the Deputy Secretary of Defense, as Chairman of the Defense Council on Integrity and Management Improvement, to take the lead in providing overall guidance and coordinating your efforts. I expect him to monitor our progress.

Near-term actions (within 90 days)

Provide resources to induce desirable breakout, effective competitive procurement, and improved pricing in the acquisition of spare parts.

Apply the DOD Parts Control Program to enhance competition. The optimum use of standard military parts or commercially available parts in development of new systems will be mandatory.

Accelerate plans for acquisition of computer hardware and software to assist parts control personnel.

Institute action to identify disparities in spare parts prices within and among various procuring activities.

Employ value engineering to investigate spare parts where cost or price exceeds intrinsic value.

Assign more engineering resources to review new reprourement data packages for adequacy.

Develop and test a procedure to make breakout of spare parts a factor in source selection for new major systems. Develop new incentive arrangements to reward contractors for cost savings generated by their efforts.

Negotiate contract data provisions which, as appropriate, reduce contractors' proprietary rights in data. A DAR deviation is approved for this purpose.

Designate acquisition of spare parts and reprourement data as an agenda item in Acquisition Strategy Panels, Advance Acquisition Plans, and Acquisition Review Councils.

Revise performance evaluation factors for acquisition and logistics managers. Include emphasis on spare parts pricing, breakout, competition, and value engineering accomplishments.

Implement DAR Supplement No. 6, "Replenishment Spare Parts Breakout Program" upon receipt.

Consider in all contracts, as appropriate, the Government's right and ability to breakout and procure competitively spare parts.

Discourage use of government specifications and contractor proposed engineering designs that inhibit subsequent competitive procurement of spare parts.

Continue action on my "Ten-Point" Program to insure that prices paid for all spare parts are fair and reasonable.

Pursue appropriate refunds or other recoupments vigorously following any audit or other disclosure of incorrect pricing or overcharge.

Review existing contracts to fully address any and all opportunities for improved pricing of spare parts, including breakout and competition.

Instruct acquisition personnel to challenge any procurement action for spare parts where estimated or negotiated price appears unrelated to intrinsic value.

Mid-term actions (within 180 days)

Reexamine existing policy on patent and data rights arising under government funded IR&D.

Expand training curricula to insure proper emphasis, understanding, and technical skill level for all personnel engaged in the acquisition of spare parts.

Assign special task forces to review existing procurement data packages for spare parts with high annual buy/quantity values.

Evaluate and make recommendations for changes to existing authorization, appropriation, apportionment, budgeting, and financial management practices, and regulations pertaining to acquisition of spares.

Pursue with appropriate Congressional Committees and their staffs the merit of a two-year authorization for acquisition of replenishment spare parts and consumables.

Insist upon contract terms and conditions in all future acquisitions that afford more equitable treatment and provide for greater assurance of fair and reasonable prices.

Long-term actions

Automate data repositories to improve the acquisition, storage, update, and retrieval of reprourement and technical data.

Evaluate and assess accomplishments under the near- and mid-term actions for additional policy direction, as appropriate.

I am aware of the burdens these actions impose upon you and your staffs. However, we cannot defer action until such time as additional resources might be authorized and become available. Your full cooperation is appreciated.

CASPAR W. WEINBERGER.

Enclosure.

**OPTIMIZE USE OF STANDARD MILITARY PARTS OR COMMERCIALLY AVAILABLE PARTS
IN DEVELOPMENT OF NEW SYSTEMS**

The DOD Parts Control Program promotes use of military preferred standard piece-parts during engineering design, development, production, or modification of equipments and major weapon systems. The program fosters standardization, which leads to greater demand for standard parts, reduction in varieties of parts in inventory, resultant increased production runs, and competition through multiple sourcing. It is accomplished through the engineering review of nonstandard commercial parts and recommended preferred standard item replacements. DODI 4120.19, Parts Control Program (PCP), is required in contracts for major weapon systems, and items of equipment where logistics support is required, and in which acquisition managers foresee appreciable life-cycle cost savings.

I am directing action to require mandatory application of the DOD Parts Control Program (at the present time approximately 40 percent of weapon system contracts are using the program on a voluntary basis). DODI 4120.19 shall be revised to reflect the change from a voluntary to a mandatory program.

DLA should proceed with plans for acquisition of computer hardware/software to assist parts control personnel to achieve real time processing. Submission of the DLA plans for accomplishment is directed within 60 days.

GIVE ACQUISITION OF SPARE PARTS THE NECESSARY ATTENTION

On August 2, 1983 I issued a revised regulation (DAR Supplement No. 6) dealing with the breakout of spare parts. It provides procedures for screening requirements for replenishment spare parts to break away from systems contractors for the purpose of buying them competitively or from the actual manufacturer (breakout). The regulation enhances the cost saving objective of break-

out, contains substantive revisions of a number of procedures, and incorporates features that increase the utility of resources devoted to the screening process. You will insure that your personnel immediately implement the designed purpose of this regulation as a matter of highest priority.

USE VALUE ENGINEERING TO INVESTIGATE PARTS WHERE COST EXCEEDS INTRINSIC VALUE

The objective of Value Engineering (VE) is to identify more cost effective alternatives. An effective spare parts value engineering program must include procedures to identify those spares whose price is excessive and appropriate action to reduce unnecessary cost. Accordingly, each DOD component will:

Within 60 days institute at each spares buying activity procedures to "flag" price disparities in spare part contracts.

Assign adequate value engineering resources to review spares purchases and reduce excesses. Use ad hoc government VE teams, contract VE services, DOD personnel who currently have VE as a primary or collateral responsibility, and contract teams funded by the VE program clause of the DAR.

Revise the current Value Engineering Incentive DAR clause for all supply and service contracts of \$100,000 or more to mandate its use in contracts less than \$100,000 for spare parts. Effective immediately, contracts for spare parts and repair kits of \$25,000 or more for other than standard commercial parts will contain a VE incentive clause.

INSURE THAT PRICES PAID FOR PARTS ARE FAIR AND REASONABLE

Offer incentives to employees to increase competitive bidding and reward those who vigorously pursue cost savings. This requires beneficial suggestions/VE award programs specifically tailored to the acquisition of spare parts.

Take stern disciplinary action with those employees engaged in the acquisition process who are negligent in implementing our procedures. Performance in this area should be a scored evaluation factor in performance ratings.

Alert defense contractors to the seriousness of the problem and of our firm intention to keep prices under control. I expect implementation of an ongoing management procedure to insure continuing high level attention to this area. Action shall be taken to insure the high-level contractor management mirrors this effort.

Task Competition Advocates in all DOD components to challenge spares orders not made competitively or which appear to be excessively priced. Competition advocates must be provided sufficient authority to intervene directly in instances where policy is not being appropriately implemented. A draft DOD directive on competition advocates will be prepared and distributed for comment within 90 days.

ACQUIRE REPROCUREMENT TECHNICAL DATA UNENCUMBERED BY NEEDLESS OR IMPROPER PROPRIETARY RESTRICTIONS

As part of the evaluation and source selection process, specific consideration will be given to breakout and competitive procurement of spare parts. Our ability, including cost to the Government, to acquire reprocurement data packages with unlimited rights thereto (given the nature and propriety of the prospective contractors' asserted rights) will be evaluated.

Examine and advise me of your views as to existing policy dealing with the rights accruing to the Government under IR&D.

Negotiate firm dates in new contracts by which "unrestricted" use of data encumbered by the contractor's background patents and/or data rights for data initially developed at its expenses will be available. Particular attention should be given to those cases where the Government has borne the major cost of development.

AUTOMATE DATA REPOSITORIES TO IMPROVE THE ACQUISITION, STORAGE, AND RETRIEVAL OF TECHNICAL DATA

With state-of-the-art technology, the automated data repositories can:
Eliminate bottlenecks in paper/microfilm manual identification, retrieval, and individual reproduction operations.

Reduce the cost of repository operations and the cost of data.

Permit direct interface with industry and among the Services in computer-aided design (CAD) and computer aid manufacturing (CAM) systems.

Provide for computerized review and inspection, indexing, and verification of "rights in data" claims.

Provide for timely identification of the appropriate data and its subsequent delivery to the user or buyer via telecommunications.

The Services will support and fund the ongoing Tri-Service/Joint Committee on Printing effort to acquire and install prototype repositories with a target date for completion of fiscal year 1987. The standard system specification has been defined. Plans to be supported by the Services include, subject to availability of funds:

Army: Installation at MICOM and CECOM in September 1984.

Air Force: Complement Army contract, and fund in fiscal year 1984 for one system.

Navy: Installation at NPFC in September 1984. Approve of the NAVAIR system for implementation at the NAVAIR central repository.

ELIMINATE DISINCENTIVES ON INDUSTRY TO FACILITATE BREAKOUT AND COMPETITION OF SPARE PARTS

What we do up front in the development of major systems and in obtaining adequate reprocurment technical data at the outset of production profoundly influences our ability to break out spare parts for procurement from other sources. Clearly lacking is a motivational response needed from our major systems developers. Absent that, we will have simply modest improvement with no assurance that such improvement will continue. Therefore, we are considering two new efforts.

First, we must make breakout of spare parts a factor in the source selection of a major weapons systems developer. Second, we must couple this with incentive arrangements that provide the contractor a share in cost savings generated by his efforts. Such procedures will be developed for test at the earliest practicable date. These procedures have the potential of assuring long-term application and benefit without the need to increase significantly manpower resources, without substantially adding to acquisition costs, and without unduly prolonging procurement leadtime.

Following is a draft concept paper that discusses this in greater detail. I wish your constructive comment's within 30 days with the full intention of designating a joint service and DLA task group to develop a comprehensive test program within 90 days. Full-scale implementation will be accomplished following evaluation.

"DRAFT" CONCEPT PAPER

Subject.—Enhancing (1) breakout and (2) competitive solicitation and procurement of both initial and replenishment spare parts for new major systems.

Problem.—The cost of acquiring the subject parts is increased by any one or a combination of the following:

- existing in-house "cost models" that distort prices paid for spare parts by inappropriately or disproportionately allocating the prime contractor's costs for engineering, manufacturing, material handling, G&A, and plant-wide variances as well as associated overhead charges and profit;

- tiering of vendor acquired spare part prices merely flowing through the prime contractor with the latter's overhead and profit;

- absence of effective competition for subcontracted items and vendor furnished parts;

- proprietary rights, data right, and patent right limitations;

- incomplete, inaccurate and/or obsolete reprocurment data packages;

- insufficient procurement leadtime;

- dated and/or incomplete knowledge of the industrial base;

- institutional biases on the part of industry and government;

- incomplete and/or inadequate "make-or-buy" program reviews;

- disincentives on contractors to break out vendor acquired parts for direct acquisition by the government;

- lack of positive incentives on contractors to break out vendor acquired parts for direct acquisition by the government;

- lack of government personnel resources with the appropriate skills and training to get the job done;

lack of high level management attention in industry ;
 lack of high level management attention in government ;
 prior course of dealings, industry/trade practices, and tradition ;
 late apportionment of fiscal year funds from O&M acquisition ;
 incomplete, untimely, and inadequate acquisition planning ;
 low volume buys ; and
 disproportionate emphasis on meeting operational requirements.

Discussion.—The spare parts "problem" is not any one problem. It is many problems that vary in type, combination, and impact depending upon :

the point in time during the acquisition process when the issue is being addressed ;

the type, nature, and quantity of the spare parts at issue ; and

the system that is being supported.

There is no one solution. That is not to say, however, there is no solution. The problem area has been broken down into functionally related components. They are :

problem(s) that are in being ;

problem(s) we are presently evolving ; and

problem(s) that will arise in the future.

This concept paper focuses primarily on how to avoid the problems in the future. There is some immediate transference possible, and that is encouraged.

Analysis.—Any conventional solution is invariably labor intensive. That makes it somewhat less than viable, irrespective of conceptual appeal. A solution to the problem is required that is :

not labor intensive in terms of government personnel ;

predisposed to alter in some meaningful way our traditional approaches ;

acceptable to industry, for the problem cannot be solved by the government alone ;

cost-effective in a way that is readily apparent and demonstrable ;

easy to communicate to the acquisition work force, where the rubber hits the road ;

not so complex as to be difficult to comprehend or to implement ;

susceptible of being implemented within all of DoD with a high degree of uniformity so as to preserve the concept of "one face to industry" ;

not too costly, nor should it require substantial investments of program funds to initiate and/or accomplish ;

not contrary to the principle of decentralized management and the preservation of decisionmaking authority, flexibility, and discretion at the lowest possible level ; and

financially beneficial to both industry and government.

The solution dictates that it be approached early in the acquisition process while there is still effective competition to assure a reasonable degree of industry responsiveness and reasonable attendant costs. The techniques employed must be compatible with existing acquisition practices and require no new authorities, laws, or regulations. Additionally, it is at the earlier stages of the acquisition process where the leverage of any incentive is greatest because so much of the program is still prospective. The "work" must be accomplished by contractor personnel but not as "services." There must be on-going visibility by high level management in both industry and government. The rewards to industry must be immediate, near term, and long term ; all three are required. The same holds true for the government. The rewards enjoyed must not be at the expense of otherwise realizable profits and/or incentive fees in a way that merely reapportions the profit pool. The payoff must be big to attract and to hold the continuing attention of all—including the Congress and the public. Lastly, implementation in the very near term should be possible.

Solution.—All basic tenets must be employed to be effective, but the quantitative measures should be assembled to, or reserved for, the discretion of decentralized management and planned on a case-by-case basis. The basic tenets are :

1. The competition leading to award of FSED for a major system should turn, in part, on the prospective prime contractor's technical and management proposals addressing such things as :

Make-or-Buy Plan.

Engineering Design in terms of furthering utilization of commercially available components, non-proprietary items, competitively available vendor material, military standard parts.

Management Plan to facilitate: Early breakout; parallel competitive sources for vendor items; accomplishment of the aforementioned engineer-

ing design; review of technical data packages for completeness, suitability, currency, and relief from inappropriate proprietary restrictions; and enhancement of the competitive vendor base and the establishment of new vendor sources during FSED and the early phases of initial productions.

2. The prime contractor's additional engineering, design, and management effort to accomplish the objectives set forth in his proposal(s) for this express purpose should be a separately priced line item in the pertinent FSED contract.

3. The instant FSED contract should provide for an Award Fee modeled on the "report card" concept. It should provide for an award fee determination panel composed of high levels of government management; periodic evaluations to influence prospective behavior; written critique by the Service Secretary to the CEO; the immediate payment of all award fee amounts earned; and no rights of appeal.

4. The instant FSED contract should provide for a separate Memorandum of Agreement (MOA) between the prime contractor and the government. It would be negotiated with all offerors while still in proposal evaluation and source selection. The purpose for the MOA is to get advance agreement on the amount of the royalty and/or the licensing fee to be included in selected vendor prices. The fee arrangement would be expressed as a percentage of the item price paid by the government. Then, should those vendors later be awarded a contract directly by the government, the agreed-upon fee (having been included in the price) would be paid to the prime contractor by the vendor. A licensing fee would be proper if contract effort involved utilization of the prime contractor's proprietary data; a royalty fee would be proper when the prime's proprietary data is not a factor. The MOA would prescribe the term of years within which the agreement would be in force and on whom it would be binding. Any fees paid pursuant thereto would be in the purchase price of the vendor item—hence, it would be borne by the user. However, care must be exercised to avoid payment of royalty fees for break out that would and should have been otherwise accomplished as part of the contractor's normal responsibilities.

Conclusion.—The proposed solution offers an immediate incentive. It can influence and even prove a determinant in proposal evaluation and source selection for a major system. It focuses attention on the problem early on, before design is complete and a subcontractor/vendor matrix established. By directly funding the contractor's associated effort, it does not increase his overhead costs and also becomes a direct cost on which other overhead can be charged and profit earned. However, as a direct cost, it must be done and done in accordance with the contract's terms and conditions. It is subject to government oversight. The award fee offers a near-term incentive while focusing high level management attention on the effort. The licensing and/or royalty fee arrangement offers a long-term and continuing incentive to make the program succeed because it returns profits to the prime without any investment of capital or on-going utilization of production resources. The arrangement can also be flowed down. It eradicates by offset all the incentives presently in-place that inhibit breakout, competition, and contractor assistance. It employs practices well known to the contracting community both in the private and public sector. It need await no special approval or authorities to be tested or implemented. It does not add to procurement leadtime and, in competition, it should add little or no cost to FSED.

Recommendation.—Immediately develop a test program leading to full-scale implementation. The initial resultant guidance should be expressed in no greater detail than policy direction as would be found in a Directive or an Instruction. At an appropriate time, suitable DAR coverage could be published.

Senator THURMOND. Now, on the sheet here, Secretary Weinberger's 10 points are excellent points. I don't know whether you got those up or who did.

Are you familiar with that?

Mr. THAYER. Yes, sir.

Senator THURMOND. I think it is an excellent idea to promote competitive bidding and reward employees who pursue cost savings. When some employee has pursued cost savings, he should be pointed to with pride or given a certificate or award.

On the opposite, take disciplinary action when employees have not been diligent. That is important. In other words, reward good employees and discipline those who are not and go for removal if this is carried on to any great extent, if the employees were negligent in implementing the DOD procedures.

Mr. THAYER. Yes, sir, that is correct. We have already made such awards.

Senator THURMOND. I won't take time to go into these, but I thought these were very good points. The 10-point program has come to our attention.

That is all I have, Mr. Chairman. Thank you very much.

Mr. THAYER. Thank you, Senator.

Chairman TOWER. Senator Quayle?

Senator QUAYLE. Thank you very much, Mr. Chairman.

I also want to join in complimenting you, Mr. Secretary, and Secretary Weinberger, for getting into this. You have brought attention to some of the faults of DOD's spare parts procurement system. I am not casting blame on you since you have undertaken some steps to correct the deficiencies.

Of the spare parts, the \$3 million you referred to, how many of those are awarded sole source?

Admiral GRINSTEAD. I can't answer that for the whole Department of Defense, but for DLA, 80 percent of our awards in 1983 were competitively awarded.

Now, if you recognize that we work the big-ticket items, big-dollar items first, you might have only a third or 30 percent of the items involved in getting to 80 percent of the dollars.

So, 80 percent of the dollars were competitive. If I take out fuel and take out personnel-type items such as medical subsistence and clothing, we are down to a 62- or 63-percent competition rate.

Senator QUAYLE. My question is on the \$3.8 million spare parts. I believe that was the figure you gave up in talking about the lack of ability to get a handle on \$3.8 million spare parts.

I have seen a contrary number ranging as high as 90 percent of those \$3.8 million spare parts or at least some category in the \$3.8 million are sole source and are not competitive.

Are my figures way off base?

Admiral GRINSTEAD. You are probably not too far off. Fifty-two percent of the 2.2 million items I manage, do not have sufficient data to be fully competitive. We are only using item part numbers as contract references to buy with.

If you take them as a mass, they are not big ticket items, as a rule.

Senator QUAYLE. Haven't some of the abuses, the ones that have been publicized, the cost of the screw and some of the smaller items where there is not much oversight come about because the contracting officer is inclined not to give attention to it because it is a small item? Isn't that the real problem?

Secretary Thayer, you expressed concern that the \$3.8 million figure is a very difficult figure to get a handle on.

Isn't that part of the problem?

Mr. THAYER. Yes; it is part of the problem. There are many different numbers kicked around when people start talking about percentage of competitive procurements.

Some items are price-competed by a process referred to as advertising where strictly price alone determines the winner. This category amounts to 6.2 percent of the contract actions we award.

Now, those can be belt buckles or shoes or things like that.

Price competition which involves the more complex items, weapon systems included, of course, equates to 46.1 percent of our awarded actions.

In addition to that, there is a third category called design/technical competition. That is only three-tenths of 1 percent, but the total of all three categories is 52.6 percent—competitive actions.

Senator QUAYLE. I am interested in spares because this is where the real abuse occurs. I don't think you have the data.

Mr. THAYER. I don't have it with me.

Senator QUAYLE. Mr. Chairman, I would like to request that he break it down as much as possible to show what percentage of the spare parts.

Mr. THAYER. We will give you a breakdown of the \$3.8 million that I mentioned.

[The information follows:]

BREAKOUT OF ITEMS MANAGED

As of September 30, 1983, the Department of Defense was managing 4.2 million nationally stock numbered items. Of course, approximately 2 million have been considered in the spare parts breakout screening process of which approximately 30 percent have been coded for competitive procurement.

Senator QUAYLE. The numbers I think you will see are quite large.

On page 9 you say:

We can enhance competition by emphasizing second sourcing, but we need your support of our legislative initiative.

What bill is it that you are referring to? What is the legislative initiative?

I would like to know how we can help competition.

Mr. WADE. We have proposed legislation which addresses this question. Let me provide details about it.

[The information follows:]

Dr. WADE. Proposed legislation on this matter was submitted to the Speaker of the House of Representatives on 31 August 1983. The proposed legislation would authorize negotiation for the purpose of establishing and/or maintaining alternative sources of supply for purposes of competition. Right now the approach we have to take is to utilize negotiation exception (16) which permits negotiation with selected sources for the purposes of national defense or industrial mobilization.

Senator QUAYLE. This is Senate bill 2004?

Mr. WADE. It has just been forwarded to the committee.

Senator QUAYLE. I assume our chairman will get a look at that then. I would be interested. It is important to me as well as to him.

Anyone would be interested in a legislative initiative to enhance competition and second source.

Mr. THAYER. We will keep you informed on that.

Senator QUAYLE. Mr. Thayer, I would like to summarize a complaint that a lot of my small businessmen in Indiana have with DOD.

These are people I have known and dealt with over time. They really do produce high-quality spare parts. I think they can be com-

petitive in bidding on a contract, but they say one of two things. The procurement sole source or the contract is simply not advertised enough. This is not a new complaint. This goes back since I have been in the Congress.

It sort of underscores this item on the GAO synopsis where small contractors were either rejected outright or required to go through a lengthy qualification process.

We don't have many large contractors in the State of Indiana, but we have small business machine tool people. What should I tell them that you are doing to help the situation?

Mr. THAYER. I think we are doing several things. We are trying to simplify the procurement process, but it still is complex, at least from a small businessman's point of view. There is no question that anyone that encounters a business potential, or what is perceived as a business potential, with the Department of Defense can be discouraged by the complexity of doing business with the Government.

In order to try to combat that, we do have teams now going around the country and certainly we will be delighted to go into your State, in certain key areas if you feel it would be helpful, to send small businessmen to school on how to do business with DOD.

The Air Force has gone further than that. They have a traveling van with displays of spare parts. In effect, they go into a community and say, "Can you make this?"

It can be a rather simple part or something more complex, but something that a small manufacturing business, in particular, might have a desire to compete for. We have small business advisers and others who will assist small businesses by telling them how to go about doing business with Defense.

Senator QUAYLE. My time is up. I will follow up on the van system.

Mr. THAYER. I know we have at least one van.

Senator QUAYLE. Thank you very much, Mr. Chairman.

Chairman TOWER. Senator Exon?

Senator EXON. I will pass for the time being.

Chairman TOWER. Senator Levin?

Senator LEVIN. Thank you, Mr. Chairman.

Welcome, Mr. Secretary. The audit report of the Defense Inspector General back in June made a suggestion relative to spare parts. He stated that to reduce the cost growth in spare parts the services should require contracting officers to certify that the price of an item is fair and reasonable, whenever the price increases by 25 percent or more in a 12-month period.

Following that recommendation of the Inspector General, I offered an amendment to the authorization bill. In essence, my amendment carried out that recommendation without specifying the percentage or the length of time, telling DOD to adopt regulations to put some ceiling on the cost growth of spare parts that would be tolerable within a certain length of time. Otherwise, the contracting officer would have to certify in the file to the effect that it is essential, needed, justifiable, reasonable, and so forth.

There was a lot of good bipartisan support for that in this committee and outside the committee. It was adopted by the Senate and later adopted by the conference and is now part of the law.

Will you be implementing that amendment soon with regulations?

Mr. THAYER. Yes, we will. As a matter of fact, Senator, we may expand on that amendment a little. The law just requires the establishment of a single threshold. We believe that a single threshold might not always catch the increase that would make it an exorbitant situation.

In addition to just a threshold, we are reviewing other elements that we can add so that we really do have a foolproof system that will raise a red flag and make sure that we catch those.

Senator LEVIN. Do you now at least support the general purpose of that amendment?

Are you now on the side of that amendment?

Mr. THAYER. Yes. We should have the general outline and the ground rules established for that before the end of the year.

Senator LEVIN. You now consider that a useful amendment?

Mr. THAYER. Yes.

Senator LEVIN. The question of competition, of course, is part of the problem relative to spare parts price increases. Apparently there is less competition or there was less competition in the area of aircraft engine spare parts in 1982 than there was in 1980.

Are you familiar with those figures?

Mr. THAYER. I don't have the spare parts numbers.

Senator LEVIN. This is an Air Force spare parts figure.

Mr. THAYER. I don't think that is true with the Defense Logistics Agency.

Senator LEVIN. Is that generally true with DOD? Do we have comparable figures for DOD comparing the spare parts competition year by year?

Mr. THAYER. No. What information we have we are going to get for Senator Quayle. I will make sure the same information will be available to you.

Senator LEVIN. Spare parts competition in the Air Force, total spare parts dollars, only 22.3 percent of those dollars were competed for in 1980, even less in 1982, 20.7, which is actually quite a significant drop in terms of competition.

Can somebody explain why there was less competition for spares in the Air Force in 1982 than there was in 1980?

General HANSEN. I am familiar with the percentages, Senator Levin. Those are exactly right. The competition is tied to acquisition.

During that period of time we started acquiring new weapons systems, so actually those weapon systems were tied to the procurement, initial procurement, of the weapon systems themselves.

In effect, weapon systems you could say were competed by virtue of a source selection and during any high period of weapon system acquisition you will find out that competition drops off also.

Senator LEVIN. On spare parts?

General HANSEN. Yes; because we have two funding categories and in one of the program budgets, which is budget 1600 in the Air Force, we procure our spare parts.

So, there is actually less money available. When you have higher acquisition of weapon systems, there is less than in the preplanned spares area which is a different budget code.

Dr. WADE. Senator Levin, may I add to that point?

As mentioned earlier, we look at all new weapon programs and sub-systems. We are considering a concept to build into our request for proposal criteria as part of source selection, contractor plans, and efforts to attain competition in purchasing of parts and breaking out parts for competitive procurement by the Government.

Senator LEVIN. I am talking about the actual purchases of the spare parts, the actual dollars competed for in spare parts.

Dr. WADE. You have to get at the front end.

Senator LEVIN. I understand what you are saying, but that is not my question.

My question is: Why would there have been actually fewer dollars percentage-wise that were competed for in terms of spares in 1982 than in 1980?

It can't be that you bought more weapon systems in 1980.

Dr. WADE. One can estimate that in those previous years when we procured weapons without sufficient attention to the actual flow rate needs of spare parts and catch-up in 1982 resulted in going to the prime equipment supplier.

When you have a shortfall of funds, then want parts quickly, you pay a price for it.

Senator LEVIN. If you will take a look at the question, maybe you can give a supplemental answer for the record. The less money we have for spares, the more we ought to compete because we save money on competition.

Most people will agree we generally save money through competition. The fact that we have less available for spares is the more reason to compete. I don't think the fact there is a shortfall in the spares account explains anything about the amount of competition we have for whatever dollars that are available for spares.

You may want to supplement that answer because it is not particularly satisfactory.

Mr. THAYER. All right.

[The information follows:]

AIR FORCE COMPETITIVE RATE CHANGE

The Air Force reflected a statistical reduction in the rate of competition for spare parts between 1980 and 1982. By volume of parts dollars, according to Air Force statistics, 1.6 percent more was purchased single source in 1982 than 1980. This is apparently attributable to the mix of spares. A proportionately higher value of initial spares was purchased in 1982 than 1980. Initial spares are provisioned concurrently with major equipment being fielded. To assure compatibility, this initial provisioning is generally purchased from the source providing the part incorporated in the major equipment. Subsequently, when these parts are provided as replenishment parts, they will be screened for breakout to competition. If one looks at the Air Force statistics for 5 years 1978-1982, 1982 reflects the second highest competitive rate.

Senator LEVIN. One point of Secretary Weinberger's 10-point plan is that we should be rewarding employees who vigorously pursue costs. We recently read of a relatively well-known whistle blower, Mr. Spanton, who made some allegations about the amount of money that we were laying out to one particular contractor.

The special counsel of the Merit System Protection Board, Mr. O'Connor stated that the Defense Contract Audit Agency, punished

Mr. Spanton "for doing his job", which was to blow the whistle on some of these excessive costs.

I am wondering whether or not the DOD has any comment here on the Spanton case, because it seems to be running, at least according to the Merit Board's general counsel, in exactly the opposite direction of your point No. 1, which is to reward employees who vigorously pursue cost savings.

Do you have any comment on the statement of the counsel?

Mr. THAYER. Not much. I think the Spanton case has been well publicized. My personal opinion, Senator, is that in this case Mr. Spanton was one of several people who within the Audit Agency and the Air Force discovered these discrepancies and are working to correct them.

Mr. Spanton, for reasons of his own, elected to go public with those discrepancies. In terms of his transfer, he had been in one location sufficiently long—5 years. Normally an auditor is stationed at a particular spot for a period of time. It is the common practice, not only within the Department of Defense, but in the private sector as well to transfer the person to another location.

I have really nothing more to say on that.

Senator LEVIN. To go back for a moment to competition, we are now supposed to have competition advocates in the Department of Defense who push for competition whenever possible, because of the benefits that are perceived to come from such competition.

How many of your major buying activities now have competition advocates in place?

Mr. THAYER. I believe all do.

Senator LEVIN. How many major buying advocates are there?

Mr. THAYER. I don't know. About three dozen according to Admiral Grinstead.

Senator LEVIN. They are all in place? GAO told us something different this morning.

Mr. THAYER. I believe they are all in place or they have all been designated.

I don't know if you were here earlier, Senator, when I said that in many cases we haven't added a man who exclusively does nothing but represent himself as a competition advocate, but in cases where we think it is justified, we will have the Chief of Pricing or the Chief of Procurement perform that function.

If that proves to be a burden, excessive to the demands of his job, then we will take steps to correct that.

Senator LEVIN. My time is up. I would appreciate a list of all those purchasing or buying activities because this morning the GAO said quite to the contrary, there are not competition advocates in all buying activities.

Mr. THAYER. Well, they are wrong. I will get you that list.

Senator LEVIN. Thank you.

[The information follows:]

LIST OF DOD COMPETITION ADVOCATES

Competition advocates were established within the Department of Defense in November 1981. The Under Secretary of Defense for Research and Engineering is the overall competition advocate for the Department. Each service and the Defense Logistics Agency has established advocates at subordinate activities.

The advocates are integrated into the acquisition structure of an organization to help remove impediments to competition and enhance competitive opportunities. Most competition advocates have other acquisition responsibilities. The Navy has one full time advocate and the Air Force seven full time advocates. The advocates have been appointed at high management levels to properly carry out their responsibilities. The listing by organization of competition advocates follows:

MAJOR LOCATIONS OF DOD COMPETITION ADVOCATES

Army activity

United States Army Europe, Heidelberg, Germany.
 Forces Command, Ft. McPherson, Ga.
 Training & Doctrine Command, Ft. Monroe, Va.
 Chief of Engineers, Washington, D.C.
 Surgeon General, Ft. Detrick, Md.
 National Guard Bureau, Washington, D.C.
 Assistant Chief of Staff for Automation and Communications, Washington, D.C.
 Ballistic Missile Defense Systems Command, Huntsville, Ala.
 Military District of Washington, Washington, D.C.
 US Army Communications Command, Ft. Huachuca, Ariz.
 Western Command, Ft. Shafter, Hawaii.
 Military Traffic Management Command, Washington, D.C.
 Health Services Command, Ft. Sam Houston, Tex.
 Troop Support Agency, Ft. Lee, Va.
 US Army Materiel Development & Readiness Command, Alexandria, Va.
 US Army Armament Materiel Readiness Command, Rock Island, Ill.
 US Army Armament Research & Development Command, Dover, N.J.
 US Army Aviation Research & Development Command, St. Louis, Mo.
 US Army Communications & Electronics Command, Ft. Monmouth, N.J.
 US Army Electronics Research & Development Command, Ft. Monmouth, N.J.
 US Army Missile Command, Huntsville, Ala.
 US Army Tank-Automotive Command, Detroit, Mich.
 US Army Test & Evaluation Command, Aberdeen Proving Ground, Md.
 US Army Troop Support & Aviation Material Readiness Command, St. Louis, Mo.

Navy activity

Competition Advocate General, Washington, D.C.
 Naval Air Systems Command, Washington, D.C.
 Naval Sea Systems Command, Washington, D.C.
 Naval Supply Systems Command, Washington, D.C.
 Naval Electronics Systems Command, Washington, D.C.
 Naval Facilities Engineering Command, Washington, D.C.
 Naval Data Automation Command, Washington, D.C.
 Office of Naval Research, Washington, D.C.
 Commandant Marine Corps, Washington, D.C.
 Military Sealift Command, Washington, D.C.
 Joint Cruise Missile Project Office, Washington, D.C.
 Automatic Data Processing Selection Office, Washington, D.C.
 Aviation Supply Office, Philadelphia, Pa.
 Ships Parts Control Center, Mechanicsburg, Pa.
 Naval Regional Contracting Center, Long Beach, Calif.
 Naval Regional Contracting Center, Naples, Italy.
 Naval Regional Contracting Center, Philadelphia, Pa.
 Naval Regional Contracting Center, Washington, D.C.
 Naval Supply Center, Charleston, N.C.
 Naval Supply Center, Jacksonville, Fla.
 Naval Supply Center, Norfolk, Va.
 Naval Supply Center, Oakland, Calif.
 Naval Supply Center, Pearl Harbor, Hawaii.
 Naval Supply Center, Puget Sound, Wash.
 Naval Supply Center, San Diego, Calif.
 Naval Resale Systems Sales Office, New York, N.Y.
 Naval Air Development Center, Warminster, Pa.
 Naval Coastal Systems Center, Panama City, Fla.
 Naval Ocean Systems Center, San Diego, Calif.

Navy activity—Continued

David Taylor Naval Ship Research & Development Center, Bethesda, Md.
 Naval Surface Weapons Center, White Oak, Md.
 Naval Weapons Center, China Lake, Calif.
 Naval Supply Depot, Guam.
 Naval Supply Depot, Subic Bay, Philippines.
 Naval Supply Depot, Yokosuka, Japan.
 Naval Ordnance Station, Indian Head, Md.
 Naval Ordnance Station, Louisville, Ky.
 Naval Air Station, Pensacola, Fla.
 Naval Air Station, Patuxent, Md.
 Naval Air Station, Point Mugu, Calif.
 Naval Oceanographic Office, Bay St. Louis, Miss.
 Naval Weapons Support Center, Crane, Ind.
 Naval Avionics Center, Indianapolis, Ind.
 Naval Avionics Center, Great Lakes, Ill.
 Naval Ship Yard, Portsmouth, N.H.
 Naval Ship Yard, Norfolk, Va.
 Naval Ship Yard, Mare Island, Calif.
 Naval Ship Yard, Pearl Harbor, Hawaii.
 Naval Training Equipment Center, Orlando, Fla.
 Naval Air Engineering Center, Lakehurst, N.J.
 US Naval Office, Singapore.
 Marine Corps Air Station, Cherry Point, N.C.

Air Force activity

Air Force Systems Command, Andrews AFB, Md.
 Aeronautical Systems Division, Wright-Patterson AFB, Ohio.
 Electronic Systems Division, Hanscom AFB, Mass.
 Ballistic Missile Office, Norton AFB, Calif.
 Armament Division, Eglin AFB, Fla.
 Space Division, Los Angeles, Calif.
 Air Force Flight Center, Edwards AFB, Calif.
 Air Force Weapons Laboratory, Kirtland AFB, N. Mex.
 Arnold Engineering Development Center, Tenn.
 Air Force Contract Management Division, Kirtland AFB, N. Mex.
 Air Force Office of Scientific Research, Bolling AFB, Md.
 HQ Air Force Reserves, Robins AFB, Ga., plus 11 bases.
 Air Force Logistics Command, Wright-Patterson AFB, Ohio.
 Air Force Acquisitions Logistics Center, Wright-Patterson AFB, Ohio.
 2750 Air Wing, Wright-Patterson AFB, Ohio.
 Air Logistics Center, Tinker AFB, Okla.
 Air Logistics Center, McClellan AFB, Calif.
 Air Logistics Center, Robins AFB, Ga.
 Air Logistics Center, Hill AFB, Utah.
 Air Logistics Center, Kelly AFB, Tex.
 2803 Air Base Group, Newark AFS, Ohio.
 HQ 5th Air Force, Kadena AB, Okinawa, plus 5 other installations.
 13th Air Force, Clark AB, Philippines.
 15th Air Base Wing, Hickam AFB, Hawaii.
 HQ Air Training Command, Randolph AFB, Tex., plus 12 bases.
 Alaskan Air Command, Elmendorf AFB, Alaska.
 21st Tactical Fighter Wing, Elmendorf AFB, Alaska.
 343rd Combat Support Group, Eielson AFB, Alaska.
 343rd Composite Wing, Eielson AFB, Alaska.
 11th Tactical Control Group, Elmendorf AFB, Alaska.
 USAF Clinic, Eielson AFB, Alaska.
 USAF Hospital, Elmendorf AFB, Alaska.
 HQ Tactical Air Command, Langley AFB, Va., plus 18 bases.
 HQ Air Force Communications Command, Scott AFB, Ill., plus 7 divisions and 8 Centers.
 HQ Electronic Security Command, Kelly AFB, Tex.
 Cryptographic Support Center, San Antonio, Tex.
 Electronic Warfare Center, San Antonio, Tex.
 6948th Electronic Security Squadron, San Antonio, Tex.
 6993rd Electronic Security Squadron, San Antonio, Tex.

Air Force activity—Continued

6923rd Electronic Security Squadron, San Antonio, Tex.

6909th Electronic Security Squadron, San Antonio, Tex.

HQ Military Airlift Command, Scott AFB, Ill., plus 18 bases.

HQ Strategic Air Command, Offut AFB, Nebr., plus 26 bases.

US Air Force Academy, Colorado Springs, Colo.

HQ United States Air Forces, Europe, plus 3 numbered Air Forces, 17 wings, and 25 bases.

Defense Logistics Agency activity

Defense Construction Supply Center, Columbus, Ohio.

Defense Electronics Supply Center, Dayton, Ohio.

Defense Fuel Supply Center, Alexandria, Va.

Defense General Supply Center, Richmond, Va.

Defense Industrial Supply Center, Philadelphia, Pa.

Defense Personnel Support Center, Philadelphia, Pa.

Defense Contract Administration Services Region, Atlanta, Ga.

Defense Contract Administration Services Region, Boston, Mass.

Defense Contract Administration Services Region, Chicago, Ill.

Defense Contract Administration Services Region, Cleveland, Ohio.

Defense Contract Administration Services Region, Dallas, Tex.

Defense Contract Administration Services Region, New York, N.Y.

Defense Contract Administration Services Region, Philadelphia, Pa.

Defense Contract Administration Services Region, St. Louis, Mo.

Defense Contract Administration Services Region, Los Angeles, Calif.

Chairman TOWER. Senator Warner?

Senator WARNER. Thank you, Mr. Chairman.

First, Mr. Chairman, I would like to express my appreciation to you individually for holding these hearings. I have traveled through my State and elsewhere across the country and find an ever increasing number of people are concerned about waste, fraud, and abuse in Government.

Indeed, much of the criticism for that Federal waste has been directed at the social welfare program. By having these hearings, by the actions taken by the Secretary and his qualified Deputy, we strike a note of fairness across the board looking at that issue Government wide.

Nothing will undermine the confidence of Americans more quickly in my judgment than these cases, where dollars have been wasted, particularly in the spare parts area.

Mr. Secretary, I have read your statement. You say, "Where others have failed in the past, we are confident that we will succeed for three reasons."

I suppose previous Secretaries have tried hard to some extent, but perhaps you do bring a fresh perspective. Indeed, by virtue of your past experience, you are eminently qualified to head this effort up and I hope you do succeed.

I have just one or two very general questions. It seems to me that we may lack an adequate definition of what constitutes overpricing.

Do you need some legislative assistance in this area?

We have the hammer and plastic seats that we have read may have been 400 percent overpriced, but in the cases where they were 100 percent or 50 percent overpriced is not egregious, but certainly in terms of avoiding waste are important.

Do you need help legislatively in defining this?

Mr. THAYER. Not at this moment, we don't, Senator. I think we are getting very good cooperation from industry in tackling this problem.

I have had meetings with most of the top leadership in industry and discussed it with them face to face. They are supportive.

I think you know a lot of the senior leadership. They are a fine group of Americans in my opinion. When things like this are called to their attention, they are almost as horrified as we are to see them happening in their organizations. They have been, I think, very silent in taking their lumps when many of them could have lashed back at the Department of Defense as being one of the major culprits.

It is a shared responsibility. I think we have come a long way in recognizing that and in coming to this set of approaches to institutionalize this whole process so that it will be in place for good.

Senator WARNER. I share that observation. I think maybe United Technologies may have had a strong rebuttal for some of their problems and yet they took their lumps. We won't get into specifics.

While you come from the senior fraternity in that area, there are just an unlimited number of small contractors and that little wrench manufacturer suffered as much grief with this problem as United Technologies apparently at one time had.

How do you reach down to that level?

Mr. THAYER. We have heard from small business manufacturers and through staff personnel and discussed their concerns. We have not limited it just to the primes.

Senator WARNER. We can't reach them all.

Mr. THAYER. No; we can't reach them all. We have had industry associations in. We have talked with them. We have to reach them primarily through industry associations.

Senator WARNER. You are suggesting that self-policing then will be one of the major reasons for corrections being made?

Mr. THAYER. I think it will be self-policing, but also we will have our own procedures to detect any problems.

Senator QUAYLE. Do you favor legislation to provide stiffer penalties?

Mr. THAYER. No, sir, I don't believe so at the moment, but if we do, we will certainly come back to you.

Senator WARNER. There are certainly well-publicized cases where it was done legally and they were black-balled from bidding. I know there is some basis for that.

Mr. THAYER. We can do that on our own. Certainly the laws governing fraud are pretty clear.

The instance you spoke of, I think, was handled very well through the courts. It takes quite a while, though, to do it, but I know of no other way to do that.

In most cases where we have seen evidence of overpricing we have simply said to the management, "We think there has been overpricing," and, where they have agreed with us, they have returned the difference almost voluntarily.

Senator WARNER. I made one speech recently in Virginia using the basic theory in your testimony today and this thing has been publicized and republicized and time and time again showing the support that is in America for what you are trying to do.

I wish you every bit of luck.

Mr. THAYER. Well, we are going to get it done.

Senator WARNER. Thank you.

Thank you, Mr. Chairman.

Chairman TOWER. Senator Exon?

Senator EXON. Thank you, Mr. Chairman. I will be very brief.

Mr. Secretary and gentlemen, thank you for coming. This is a very important matter and I suspect that many of the routine questions aren't routine from the standpoint that we are all very much concerned about this and I am pleased that you are addressing it today.

I think there have been bad purchasing procedures for a long, long time in the Department of Defense, but it has been easier to talk about waste, fraud, and abuse in food stamps and aid to dependent children and somehow overlook the bad business practices in the Pentagon.

Mr. Secretary, I think with your background and experience you are going to get this matter straightened out and we are counting on you.

You have been there how many months, Mr. Secretary?

Mr. THAYER. About 10 months.

Senator EXON. Good luck to you in your efforts.

Chairman TOWER. Mr. Secretary, I have some additional questions that I would like to submit to you for written response for the record. My colleagues may as well.

I will, therefore, hold the record open until 5 p.m. this afternoon for members to file additional questions for the Secretary for response in writing.

[Questions submitted for the hearing record follow:]

QUESTIONS SUBMITTED BY SENATOR JOHN TOWER

EMPHASIS ON EXPEDIENCY

Senator TOWER. Mr. Thayer, it has been suggested that under our current procurement system we place a greater emphasis on expediency than we do on economy. A procurement agency is judged on the basis of how many orders it fills, not on the basis of how much money it saves the government. Will any of your initiatives shift this emphasis?

Mr. THAYER. Mr. Weinberger's memoranda of July 25 and August 29, 1983, to the Services cover 10 and 25 measures, respectively, which individually focus on achieving economy in the purchase of spare parts. Taken together as a whole, these measures clearly enunciate DOD determination to achieve economy through reasonable purchasing decisions.

RECOVER EXCESS PAYMENTS AND OVERCHARGES

Senator TOWER. Mr. Thayer, two years ago Congress repealed the Vinson-Trammel Act limiting the profits that could be made on a government contract.

What remedies are now available to the Department to recover excess payments?

In the event of an overpayment does the government recover interest on the overcharge?

Mr. THAYER. Certain negotiated contracts in excess of \$500,000 are priced on the basis of certified cost and pricing data submitted by the contractor. If, subsequent to the award of these type contracts, a post award audit reveals the data relied upon was inaccurate, incomplete or not current, the government has the unilateral right to reduce the price by an amount equal to the defective cost plus the applicable overhead, General and Administrative expense and profit.

In those situations where the government may have overpaid a contractor, the contracting officer will issue a letter demanding repayment. If the contractor appeals the decision, a deferred payment agreement may be arranged with the government delaying repayment until the case is adjudicated. In any case, interest on the ultimate amount owed will run from the date of the initial demand for repayment.

DOD POLICY TOWARD EQUAL LINE ITEM PRORATION

Senator Tower. What is the policy of the Department of Defense toward the equal line item proration basis of cost counting?

Mr. Thayer. The DOD policy with respect to contractor cost accounting systems is that they should follow generally accepted accounting procedures applied on a consistent basis and result in the equitable accumulation and allocation of costs.

Senator Tower. Mr. Thayer, the committee has been advised that the Department of Defense procured a particular bolt with the national stock number 5306-00-780-6348 in July 1982 at a price of \$142.50 each. This particular bolt was procured from the Boeing Company by the Defense Logistics Agency. Apparently the drawings for this particular bolt are marked proprietary to the Boeing Company. The committee has been advised that this bolt was purchased from other sources between 1976 and 1981 at prices ranging between \$25.62 each to \$38.80 apiece. According to this information this bolt was procured in August 1976 from the Pooley Machine Company in a quantity of 50 bolts at a unit price of \$38.80. In July of 1979 100 bolts were procured from the Deutsch Fasteners Company at a unit price of \$26.62 for a total buy of 100 bolts. The third procurement was made in July of 1981 from the E. J. Wirth Machine and Tool Company at a unit price of \$34.00 apiece for a total of 100 bolts.

Why is this bolt now procured by the DLA on a sole source from the Boeing Company at a price of \$142.50 each when as recently as 1981 we were procuring it competitively at a price of only \$34.00 apiece.

Mr. Thayer. The bolt is presently being procured competitively. A single purchase was made from Boeing-Vertol under contract on 5 July 1982 at a unit price of \$142.50 for a total of 50 bolts. The prior source, E. J. Wirth Machine and Tool Company which had supplied the item at \$34 each was not considered for several reasons. First, the purchase request was annotated by the inventory manager to indicate that the E. J. Wirth furnished item was discrepant. Secondly, E. J. Wirth Company, and its owner were indicted by a Federal Grand Jury in connection with the furnishing of "bogus" parts and other matters. The owner has pleaded guilty and been sentenced. The Company and owner have been suspended by DLA pending debarment. Subsequent to the single purchase from Boeing-Vertol, DISC has placed two competitive awards with a small business firm, Delta Machine and Tool Company, Inc. for 175 each at a unit price of \$11.50 and for 100 each at a unit price of \$17.50. At the time of the purchase from Boeing-Vertol, DISC was experiencing a significant problem with "bogus" parts which has since been resolved.

Senator Tower. Similarly the Defense Logistics Agency procured a particular bushing national stock number 3120-00-904-3367 in May of 1983 at a unit price of \$131.08 for a total procurement of 69 units. Apparently this part is also marked as proprietary to the Boeing Company. Information the committee has received indicates that this bushing was procured in January 1978 at a unit cost of \$36.45 from North Broward Industries with a total quantity procured of 60. The part was procured again in November of 1980 in a buy of 49 units from the Hill Industries at a unit price of \$36.25.

Why are we now procuring this part on a sole source basis from the Boeing Company at a price of \$131.08 if we in fact were able to procure it competitively between 1978 and 1981 at a cost as low as \$34.55 apiece?

Mr. Thayer. This part is not marked as proprietary to Boeing-Vertol. An award for a quantity of 69 each at a unit price of \$131.08 was placed with Boeing-Vertol on 13 May 1983 only after an unsuccessful attempt to obtain technically acceptable quotes from small business firms. The following is information on firms solicited:

North Broward Industries.—The quotation submitted by NBI was not considered. NBI, and its president, S. Perkins, were indicted by a Federal Grand Jury, tried and convicted in a scheme involving the furnishing of bogus parts and other matters. NBI and its president, S. Perkins, have been suspended by DLA pending debarment.

Edwards Aircraft.—The quotation submitted by Edwards Aircraft contained no technical data defining the item to be supplied. Buyer contacted Edwards Aircraft five (5) times in an attempt to obtain data for evaluation from January 1983 through April 1983. Edwards Aircraft did not respond.

Hill Industries.—Solicited for a quotation but did not respond.

MHC Limited.—Quotation was withdrawn. Subsequently this firm has been debarred by DLA.

Because of existing backorders for this item, an award was placed with Boeing-Vertol. DISC presently has an open purchase request for 75 each of this item. Quotes ranging from \$27.95 to \$113.76 are presently undergoing a technical determination of acceptability.

Senator TOWER. Similarly, another bushing national stock number 1560-00-015-7755 was recently procured (September 1981) at a unit price of \$163.82 in a total procurement of 545 units. Independent sources have advised the Committee that the intrinsic value of this particular part is less than \$10.00 apiece.

How do you account for the unit cost of \$163.82 apiece if in fact the intrinsic value of the bushing is substantially less?

Mr. THAYER. DISC has never purchased this NSN. The item was transferred to DISC from the Aviation Supply Office under the Consumable Item Transfer. Procurement history transferred to DISC is as follows:

Supplier and date	Award No.	Quantity	Unit price
Boeing-Vertol:			
80046.....	N00383-78A-8500-0889	297	\$142.33
80134.....	N00383-78A-8500-1017	286	144.15
80211.....	N00383-80G-0500-0072	480	162.55
80365.....	N00383-80G-0500-0285	372	163.82
81079.....	N00383-80G-0500-0412	320	174.59
81289.....	N00383-80G-0500-0740	545	163.82

DISC presently has an open purchase request for 377 each of this item. Competitive quotations from two small business firms ranging from \$14.00 to \$18.00 are presently undergoing a technical determination of acceptability. Regarding the intrinsic value, the following are several key requirements which must be considered:

Tolerance of several dimensions are 5/10,000ths of an inch.

Part must be stress-relieved after grinding by baking at 450 degree F for 2 hours.

Part must be hardened and tempered to a very high range.

For a very large quantity in the 1,000-2,000 each range a unit price of \$10.00 could be approached. For the present quantity of 377 each being procured a price in the range of \$14.00 to \$18.00 including military packaging and LOGMARS bar-code marking would be reasonable.

QUESTIONS SUBMITTED BY SENATOR GORDON J. HUMPHREY

SASC HEARING ON SPARE PARTS MANAGEMENT

Senator HUMPHREY. Secretary Thayer, a recent article in the Defense Watch stated that the Grace Commission on Cost Control cited Congress as the principal culprit in the misspending of Defense dollars. I am interested in solving the problem regardless of the culprit, but still maintain the proper oversight, checks and balances. Would you comment on this article and the finding of the Grace Commission?

Mr. THAYER. I do not feel that the issue here is a matter of finding culprits. Instead, it is for DOD and the Congress to work together to achieve all prudent savings that can be found in the PPSSCC recommendations. However, it is important to point out that over 80 percent of the savings estimates in the Grace Commission recommendations involving DOD will require congressional action. For example, the PPSSCC strongly urges the increased use of multiyear procurements, but recent congressional actions threaten the savings and stability produced by this important reform. The fiscal year 1983 Appropriations Act has so many restrictions on multiyear procurement that our contracting personnel are discouraged from including it in their acquisition strategy. Also, the fiscal year 1984 Authorizations Act approved only 7 out of the 14 multiyear candidates submitted and we expect that Congress will not appropriate funds to support some of our other multiyear candidates, so the final number of approved multiyear programs will be disappointly few.

Two other PPSSCC recommendations which will require congressional support include program stability and dual sourcing. We are doing what we can to restore needed stability to Defense business but ultimately Congress holds the key to program stability. Dual sourcing for major contracts is directly related to our desire to foster increased competition, but this cannot be achieved without congressional support.

Also, I think it is important to point out that even if we implemented all the recommendations of the Grace Commission, including those requiring congressional support, we could not obtain the savings projected in the reports. As Peter Grace testified, the Commission only had the time and resources to make gross estimates of savings. Our detailed analysis shows those estimates are substantially overstated.

THEORY FOR SPARE PARTS PROCUREMENT

Senator HUMPHREY. Secretary Thayer, there is a theory that providing the needed oversight into spare parts procurement will require increases in both personnel and ADP investments. Has the DOD analyzed this theory? Do you have an estimate of the required investment and split between the two areas? Are there other options to provide the necessary oversight to eliminate, or at least significantly reduce the fraud and abuse in this area? Is the DOD making the necessary increases in the fiscal year 1985 Budget Request in the personnel and/or ADP areas to provide the proper oversight levels?

Mr. THAYER. Our need for additional personnel and ADP resources is primarily for operational accomplishment in the management and acquisition of spare parts rather than oversight.

A recently completed Air Force study of their portion of the spare parts acquisition process concluded that the loss of over 22,000 people in their Logistics Command and the antiquated state of their ADP systems has been a major contributor to their spares problems. They have projected a requirement for some 3,000 people in the materiel management, contracting, pricing and contract administration areas to help correct the spares problems. Approximately one thousand additional personnel are planned in fiscal year 1984 with the balance being programmed in fiscal years 1985 and 1986. Some requisite enhancements to their ADP systems have previously been formulated, but further study is currently underway with respect to additional ADP improvements in the contracting process. Currently a study is underway aimed at identifying the necessary resources to accelerate many of their ADP requirements. Similar activities are in process by the other Services. But, in addition to these initiatives, the Services are pursuing initiatives to increase the level and frequency of training, including training in the detection of fraud, waste, and abuse, and to increase the incentives and rewards for cost saving actions by its employees.

LOGISTICS SUPPORT SOFTWARE

Senator HUMPHREY. Secretary Thayer, the GAO has testified that a good part of the logistics support software, including that for spare parts, was in need of updating. Has the DOD considered this recommendation and what is the planned action(s)? Have you examined standardizing, DOD wide, or by individual service, some of these software updates? Have you considered software standards which the contractors can also use and thus streamline the contracting procedures?

Mr. THAYER. In consequence of a study performed by the General Accounting Office between August and October 1983 at the request of the Senate Government Affairs Committee, the DOD is still considering recommendations made by the GAO. However, the following initiatives are in process:

The Navy Automated Transportation Documentation System (NAVADS), which automates the shipment planning and freight documentation functions.

The Naval Integrated Storage, Tracking, and Retrieval System (NISTARS), which will significantly modernize materials handling and, when combined with NAVADS and other enhancements, will provide total process control for warehouse operations.

Bar Coding in receiving, location survey, and physical inventory functions which provides more accurate data entry and eases input of information to track material as it moves from the receiving dock to storage bin, while in storage, and from storage bin to the shipping dock.

Several interim enhancements to the standard Inventory Control Point and Stock Point systems pending a major redesign of the application software.

Long term improvements are ongoing in two areas:

A complete redesign of the applications programs used at the Navy Inventory Control Points.

A complete redesign of the applications programs used at Navy stock points.

Almost all of the Navy's logistics support software utilized at the Navy Inventory Control Points and major stock points is centrally maintained by one Navy Central Design Agency. All of the updates for those two major systems are standardized.

Navy logistics support ADP improvement efforts have been concentrated on internal Navy and DOD systems and have not involved sharing software or data bases with contractors.

The Air Force is aware that its AFLC logistic support software is in need of updating and is working towards resolving this problem.

An ongoing AFLC initiative "On Line Access to Contracting Data" involves the development of a new ADP system including the design of new software. New CRT terminals and printers will be installed at each ALC with system control being based at AFLC through the use of a computer main frame. The system is designed to give contracting offices on line access to contracting data, price history information and a file interrogation capability. It will also provide a capacity for automatic analysis of this data through use of electronic spread sheets and graphics. This information will be available to buyers, analysts and managers in their work areas and will provide software utilities to assist them in their actions. The first installation of this equipment is scheduled for August 1984 and is anticipated to be complete by December 1984.

The AFLC Competitive Advocacy Office is in the process of acquiring 3 mini-computers for use at each ALC to aid in the price evaluation and establishment of fair prices and to monitor projected price and competition trends. There are also plans to interface this system with the procurement offices.

Initially, AFLC is not emphasizing the standardization of software between the Services. However, it is being contemplated for future consideration.

The ability of the Government to effectively communicate with commercial data bases through use of teleprocessing procedures exists today. Continued state of the art improvements in this area may render software compatibility unnecessary.

QUESTIONS SUBMITTED BY SENATOR ROGER JEPSEN

TRAINING FOR PURCHASING SPARE PARTS

Senator JEPSEN. Mr. Thayer, the heart of any reform in spare parts procurement will be people. The procurement officers and other employees must have sufficient training, be present in sufficient numbers and have sufficient incentives to save money in the purchase of spare parts.

(a) What are some of the deficiencies in the training of DOD employees which have been obstacles in the full DOD utilization of the Federal Supply System and other means of buying spare parts and equipment at cheaper prices?

(b) How do you plan to remedy those deficiencies?

Mr. THAYER. The question is not clear. We are not aware of the existence of a Federal Supply System. We assume the reference is to the DOD supply system, which is an integrated system for the management of supplies and the stockage of high use parts. However, the supply system is not a means of buying spare parts or equipment. In effect, the DOD supply system performs a function similar to a wholesaler in the private sector in the chain of distribution to a field supply unit (retail) and subsequently to a user. The supply system is a source of an item for an individual user, but is not a means for buying spare parts in competition with the private sector as implied in the question. As simply stated as possible, when a DOD user requires a part, he must submit a requisition to the supply system.

The user does not have the choice of requisitioning from the supply system or buying an item.

There has been recent publicity where, in isolated cases, the system was bypassed and purchases made when the item was available in the system. This was a breach of policy and procedure, and disciplinary action was taken against the

individuals involved. A study conducted subsequently revealed no widespread repetitions. We have concluded that this was an unusual and aberrant occurrence.

The DOD has established dedicated training facilities for project managers, contracting officers and other specialists involved in the procurement system. The courses of instruction are effective. However, training funds are in short supply and not all personnel are trained to the degree we would like. Secretary Weinberger, in his memorandum of August 29, 1983, has directed the Services to plan for expanding training curricula to insure proper emphasis, understanding, and technical skill level for all personnel engaged in the acquisition of spare parts.

MEASURES TAKEN TO FOCUS ON ECONOMY

Senator JEPSEN. Mr. Thayer, what measures are taken to focus on economy rather than expediency in the purchase of those spare parts that are immediately critical to national security?

Mr. THAYER. Mr. Weinberger's memoranda of July 25 and August 29, 1983, to the Services cover 10 and 25 measures, respectively, which individually focus on achieving economy in the purchase of spare parts. Taken together as a whole, these measures clearly enunciate DOD determination to achieve economy through reasonable purchasing decisions.

INCENTIVES FOR DOD EMPLOYEES

Senator JEPSEN. Mr. Thayer, you mention cash bonuses as one incentive for DOD employees to seek economies in spares procurement. What changes are you contemplating in the employee evaluation and promotion regulations to reflect the emphasis on greater economy in DOD spare parts procurement?

Mr. THAYER. Cash awards for economies are now provided through the DOD Incentive Awards Program and the DOD Value Engineering Program. In addition, the Air Force provides for awards in the Zero Overprice Program.

The Services have been revising performance evaluation factors for acquisition and logistics managers with emphasis on pricing, breakout, competition, and value engineering accomplishments. However, there will always be items that are complex, unique, critical, developed at private expense, demand high reliability, safety mandated, standardized for operational use, etc., where competition will be difficult to achieve. Individual performance must be adjusted on a number of factors and no one factor is determinative of overall performance.

INCREASED MANNING

Senator JEPSEN. Mr. Thayer, it is clear that moving away from the use of Basic Ordering Agreements will require an increase in the number of procurement personnel in the Department of Defense. What are your projections for increased manning?

Mr. THAYER. An increased number of personnel will be required to adequately staff the parts reform measures such as the breakout program, proprietary data challenges and value engineering, in addition to moving away from basic ordering agreements. The Services are in the process of projecting their needs to manage these efforts.

FACTORS HINDERING DOD USE OF SMALL BUSINESS BREAKOUT PROGRAM

Senator JEPSEN. Mr. Thayer, what are the current factors that have hindered DOD use of the small business breakout program?

Mr. THAYER. I believe the program to which you are referring is the spare parts breakout program and not the small business breakout program. Small businesses, to be sure, play a very active and important role in our spare parts purchasing. There are several major factors that have hindered use of the breakout program. The program is heavily labor intensive and requires highly trained and experienced people. Sufficient staff have not been assigned to the program for a number of years. A second factor is the unavailability of adequate technical data. This condition can result from deficient submissions by contractors; poor receiving, inspection and storage procedures; proprietary rights in data and other causes. A third factor is our lack of awareness of the actual manufacturing source and the degree of value added by the prime contractor.

Senator JEPSEN. Have the prime contractors been responsible for creating obstacles for their suppliers who might wish to use the program?

Mr. THAYER. We have heard occasional nonspecific allegations that some prime contractors threaten to discontinue business relationships with subcontractors who would furnish directly to the government, but we have no hard evidence of this situation occurring.

Senator JEPSEN. What measures have you put in place to enhance this program?

Mr. THAYER. In June 1983, we revised the breakout regulation to strengthen the procedures and remove potential bias through over involvement of the prime contractor. Newly appointed breakout program managers have been established to serve as breakout advocates (in close working relationships with competition advocates). Additional personnel are being assigned to the program. Top officials at all levels are being motivated to fully implement the breakout program pursuant to the Secretary's direction of August 29, 1983, on spare parts reforms.

REPAIR OR BUY NEW PARTS

Senator JEPSEN. Mr. Thayer, one other problem in procurement is making the decision on whether to repair a part or buy a new one. In one instance that I am aware of, a supplier of a jet engine part showed, using his own time and money, that the Air Force could save up to \$1 million per year by repairing the parts rather than by buying new ones. He was told by the procurement officer that \$1 million in savings was "not enough to bother with."

Are the people in the field being trained and provided incentives to react to offers such as this?

Do they have the expertise to make decisions on whether repair is more economical than buying new parts?

Mr. THAYER. We cannot anticipate every cost saving opportunity and provide a course of action to cover that opportunity. The Secretary's spare parts program covered by the July 25 and August 29 memoranda is being incorporated into the existing curricula of DOD training activities. The administration's position is clear, and it will be reinforced periodically at all levels and by ongoing procedures. That every possible economy is the concern of procurement officials. In the absence of any other facts except the statement of the procurement official, I believe the recommendation should have been referred to the technical/engineering personnel for review and analysis, as most procurement officials would do.

In answer to the second question, all procurement personnel are supported by trained and experienced technical/engineering personnel who are well qualified to make decisions regarding repair versus procurement.

QUESTIONS SUBMITTED BY SENATOR SAM NUNN

SPARE PARTS REQUIREMENTS

Senator NUNN. Secretary Thayer, I think any discussion of the spare parts issue in the Military Services has to begin with a discussion of the requirements.

From our vantage point, it appears that both the requirements and funding for aircraft spare parts is increasing out of proportion to reality.

Let me give an example. In the Air Force, in three years, from fiscal year 1981 to fiscal year 1984, the requirement for aircraft peacetime operating spares increased by 80 percent (\$3.2 billion to \$5.8 billion). Funding increased by 114 percent (\$2.3 billion to \$45.0 billion).

During the same period, the Air Force's aircraft inventory increased by 3.9 percent. The Air Force's flying hour program increased by 11.9 percent.

As you know, Mr. Secretary, once we set a requirement for a particular spare part, often we buy until we fill the requirement.

Have you made any effort to determine why the requirements for spare parts are growing so much faster than the inventory or operating levels?

Is anyone in DOD asking this question?

Mr. THAYER. The Department has thoroughly analyzed the growth rate of both spare parts requirements and the funding for these requirements during the period fiscal year 1981 through fiscal year 1984. Our analysis indicates that the increasing requirements for spare parts results from the Department's efforts to improve readiness and sustainability, the new systems entering the inventory, an aging fleet requiring extensive modification to meet changing threats and to capitalize on technological innovations, and unfunded requirements from one year carried over as a requirement in the subsequent year. Although spares require-

ments have grown faster than the increase in the aircraft inventory and the flying hour program, this has occurred because the requirement for spare parts is driven by both old and new aircraft which experience a much higher failure rate than mid-service-life aircraft. Approximately 80 percent of the Air Force inventory falls into this category. Factors which drive up spare parts prices for old aircraft include the start-up costs for out of production items and limited price competition due to a limited number of suppliers. Spare parts for newer aircraft reflect the cost of higher technology items, exotic material, and sophisticated manufacturing techniques.

The growth in the Military Services aircraft spares requirements is being thoroughly reviewed during the Department's current budget review process. The objective of this effort is to insure that the spares requirements are fully justified.

QUALIFICATION OF NEW SOURCES

Senator NUNN. Secretary Thayer, the draft DOD IG report on aircraft engine spare parts found that "Contractors who submitted unsolicited proposals were either rejected outright or required to undergo a lengthy qualification process that often involved evaluation by the prime contractor." It's hard to imagine someone with less incentive to approve a new contractor to produce an item that the contractor who currently is producing the item. Have you revised your approval procedures for new contractors in light of the DOD IG report? Does the prime contractor still retain any role in evaluating potential new contractors who want to do business with the government? Who now evaluates and approves new sources or contractors to participate in spare parts procurements?

Mr. THAYER. The qualification of contractors through evaluation by prime contractors is not a uniform policy of the Department of Defense. In fact, it is the usual practice of the Army to do their own evaluation of unsolicited proposals and to qualify vendors on its own. The Navy and the Air Force have relied in varying degrees on prime contractor evaluation to qualify new contractors. In large part, this is a function of the different mission of each department and the different equipment for which each is responsible.

For the Navy, during the early weapon system life, the prime contractor does retain a role in evaluating new contractors. The prime contractor is responsible for qualifying new sources while the contractor retains design control responsibility. When the system transitions to government responsibility, qualification of new contractors becomes the responsibility of the government.

As part of the Air Force Management Analysis Group's study of the spare parts acquisition process, several improvements are being considered to the qualification procedures for new vendors. A key initiative in this area will be to evaluate incentives to prime contractors to qualify multiple sources of supply for highest dollar items during the production phase of a program. This not only will provide the prime contractor some degree of risk and schedule-protection during the production but, more importantly, will provide to the government fully qualified multiple sources of supply to compete follow-on spare parts requirements in the post production support phase. While prime contractors will continue to play a role in source qualification of complex items in the post production support phase, there are a number of recommendations being studied to insure the government retains final approval authority. Use of revised procedures for first article demonstrations, generic qualification techniques and improved training of government personnel will allow expansion of qualified vendors as well as speed up the qualification process.

SPARES PARTS MANAGEMENT

Senator NUNN. Do you have any figures on what portion of the 66,000 increase in Defense Department civilians since fiscal year 1980 has gone into direct procurement functions?

Mr. THAYER. Since fiscal year 1980, DOD direct procurement operations have increased by over 4,900 spaces. These are people in occupational series which are directly related to procurement operations. There are others such as finance and accounting personnel, who are associated with these operations, who are not included in the number.

STAFFING OF PROCUREMENT FUNCTIONS

Senator NUNN. Secretary Thayer, the recent DOD IG draft audit report on engine spare parts pointed out that "the major motivation for the procurement personnel was the timely processing of documentation." The procurement officers

are generally at the FEBA (Forward Edge of Battle Area) of the battle on spare parts prices. What is the Defense Department doing to change the motivation of procurement personnel away from the quantity of purchase orders they execute so that they can pay more attention to questions like competition and price increases?

Mr. THAYER. The Secretary of Defense's memorandum of August 29, 1983, specifically requires the Services and Defense Agencies to revise performance evaluation factors for procurement and logistics managers to include a balancing emphasis on competition, pricing and related matters. This should overcome the overemphasis on timeliness in processing procurement actions.

AVAILABILITY OF TECHNICAL DATA

Senator NUNN. Secretary Thayer, Mr. Sherick made the point in his statement that one factor inhibiting the breakout of spare parts procurement is the state of the technical data on the spare parts held by the military services. A recent Air Force study found that there were almost twice as many managed parts with illegible or incomplete technical data as there were parts with proprietary data. Obviously both situations impede breakout and competition. We have heard a lot of emphasis on getting private sector to release their proprietary claim on technical data. How are your initiatives on this area being received by the companies involved? What efforts are you making to insure that the quality of the reprocurement data we already have is adequate for what we originally bought it for?

Mr. THAYER. We have initiated efforts with industry to release proprietary rights. The process involves new contracts now being awarded and items already covered by existing contractual terms. We have evidence from only a small number of parts but from all indications industry is willing to work with us.

For drawings and other reprocurement data currently held in our repositories that is not usable, we are developing a series of initiatives to correct the deficiencies. These initiatives include using automated drawing enhancement techniques, working with the prime contractors to improve the data package and using value engineering and reverse engineering techniques to develop adequate technical data.

LAYERING OF PROCUREMENT FUNCTIONS

Senator NUNN. Secretary Thayer, one recent DOD initiative on spare parts procurement has been to establish a competition Advocate's office at major procurement centers.

These offices, as I understand them, exist to help procurement officers challenge excessive prices and to encourage competition. But these offices are not directly involved in the procurement function.

If the procurement functions themselves are understaffed, why are we setting up another off-line office to give them more advice?

Wouldn't the personnel resources in the Competition Advocate Offices be better spent if they were integrated directly into the procurement function, bringing down the number of items and production quotas for which each procurement official is responsible?

Mr. THAYER. It is a well accepted management approach to concentrate authority and responsibility in one individual if a task is to be accomplished quickly. This is what we have done with our competition advocates. The perceived benefits of competition encouraged the Under Secretary of Defense for Research and Engineering, the DOD Procurement Executive, to establish competition advocates in November 1981. The Services and DLA have staffed these positions generally as a collateral duty of a high official within the acquisition office. It is our view that the Commander of every buying and requirements office is, in effect, the competition advocate for their organization. The designation of a separate individual to concentrate on this area allows the Commander to institutionalize his responsibilities to eliminate barriers to competition and ensure that noncompetitive actions are undertaken only when no competitive alternative exists. This also helps assure that competition is not undertaken for its own sake, but to support effective and efficient procurement actions in support of the mission of the organization.

BREAKOUT OF SELECTED SPARE PARTS FROM PRIME CONTRACTOR

Senator NUNN. Secretary Thayer, the DOD IG found that the DOD breakout program was not effectively implemented at the locations they visited. What

progress are the military services making in breaking out procurement of spare parts from prime contractors and competing these procurements?

Mr. THAYER. The breakout program was instituted almost 20 years ago and was subsequently considered to be institutionalized and effective. Several years back, we recognized that the program was not sufficiently staffed and that the procedures were not effectively achieving breakout to competition or direct purchase from actual manufacturers. Therefore, we revised the breakout regulation and issued it as part of the Defense Acquisition Regulation this past summer. The DOD activities have now designated breakout managers and are implementing the procedures required by the revised regulation. Experience to date, for example in the Navy, which started using the revised breakout procedures in advance of issuance, has shown a large increase in the dollar value of competitively coded spare parts due to intensive evaluation of high dollar parts using expanded staff. The initial results are encouraging, but several years of continuous quality breakout will be required to achieve satisfactory results.

FIGURES ON NUMBER OF CONTRACTS

Senator NUNN. Secretary Thayer, do you have any figures—dollar values or number of contracts—indicating the extent to which the breakout program is being implemented by the military services?

Mr. THAYER. There are several ways to measure the extent of implementation by the Services of the breakout program. One measure is the number of parts in the inventory which have been screened and assigned an acquisition method code. Of the 4.2 million nationally stocked numbered items in the inventory, approximately 2 million have been considered in the breakout screening process. Approximately 30 percent of these parts have been coded by competitive procurement.

Breakout cannot be measured in terms of contracts because there is no relationship between contracts and number of parts screened or procured. We have initiated meaningful reports in connection with the new Defense Acquisition Regulation Supplement No. 6, Replenishment Parts Breakout Program, which will accumulate data as to the number and dollar value of parts acquired each quarter broken out by whether the part is obtained by competition, direct purchase from actual manufacturers, or obtained from the prime contractor who is not the actual manufacturer. The first report from the Services is due early next year.

DEBARREMENTS

Senator NUNN. Secretary Thayer, one of Secretary Weinberger's 10 Points on Spare Parts Procurement announced in July was that the Defense Department would "cease doing business with those contractors who are guilty of unjustified and excessive pricing and who refuse to refund any improper overcharges."

How many contractors fall into this category? How many spare parts contractors have actually been debarred from doing business with the government in the last 12 months?

How many have voluntarily refunded money to the government when asked?

Mr. THAYER. Regrettably, gross inflation of prices charged for spare parts is difficult to prosecute as criminal fraud when DOD has in any way acquiesced in the actions of the contractor, e.g., where the Department has approved the price, or where cost effective methods have been accepted which allow overhead costs to be included in the price of the part. The key to prosecuting any particular case will be whether the contractor has done anything to deceive DOD in entering into an agreement to buy spare parts. When the Department has knowingly, although imprudently, entered into an agreement with full disclosure by the contractor of the prices, a criminal prosecution cannot be sustained due to lack of intent.

In order to avoid these problems in the future it will be necessary to improve contract drafting and administration and to more closely screen parts lists to determine availability prior to making additional purchases.

Where there is evidence of criminal action by a contractor the case will be referred to the Department of Justice/Department of Defense Procurement Fraud Unit. The unit was established to improve the government's overall effort to investigate and prosecute DOD contractors engaged in fraud and corruption.

There are examples of cases which have gone through lengthy prosecution and were recently adjudicated. In the case of Davey Compressor, an official of the firm was fined \$250,000 for making false statements and the government obtained a refund of \$2.75 million as the result of claims involving \$1.5 million.

In another recent case, the president of MHC, Ltd. was sentenced to three years in prison for shipping defective bolts under falsified inspection certificates. In addition, both of these companies have been suspended from doing business with DOD. Davey Compressor has recently been reinstated after it made refund and discharged the responsible official.

In fiscal year 1983, a total of 426 (296 DOD) contractors were debarred from doing business with the government. It is not possible to determine which of these were supplying spare parts in that time period without detailed examination of government and contractor documents.

Where we cannot prosecute, we are obtaining voluntary refunds. Recent instances are:

1. Sargent-Fletcher Co. of ElMonte, California, refunded \$56,000 for bracket assemblies.
2. Boeing Corporation has refunded \$3,000 for the plastic caps.
3. Sperry-Rand Corporation has refunded \$77,000 for diodes and other parts for flight simulators for the F-18.
4. Gould Inc. refunded \$84,000 for various spare parts and tools including the infamous hammers.
5. Collins Avionics and Missiles Group (Rockwell International) voluntarily returned \$3,600 for synthesizers.
6. Cessna Aircraft returned \$5,400 for spools for A37 aircraft.
7. Arrowhead Products, Los Alamitos, California, returned \$24,000 for duct assembly.

There are other requests for refunds pending and more will be requested as they come to light.

CONTRACTOR MARKUP RATES ON PURCHASED ITEMS

Senator NUNN. A recent Air Force study found one contractor marking up items purchased for the government through subcontractors by as much as 250 percent.

Does the government get anything—quality assurance, warranties—in return for these markups, or is it just a way for large contractors to spread their overhead costs?

Mr. THAYER. Yes. The government does receive benefit as a result of the markup. For example, the markup could include such things as manufacturing labor, quality control, engineering labor, procurement, shipping, etc.

QUESTIONS SUBMITTED BY SENATOR CARL LEVIN

SPARE PARTS PRICING INCENTIVE AWARDS

Senator LEVIN. Mr. Thayer, for the record will you provide the committee with a list of employees who have been paid bonuses for being price conscious and the amount of those bonuses? Will you also provide a list of disciplinary actions that have been taken?

Mr. THAYER. In the Navy, the following monetary awards have been granted through October 26, 1983, for spare parts cost saving initiatives:

Michael Sprowles of the Navy Ships Parts Control Center (SFCC) was awarded \$150 for saving \$3,000 by finding an alternate source for clamps.

Irene Uowski of the Naval Supply Center Norfolk was awarded \$1,000 for saving \$10,000 by finding an alternate source for fiberglass plates.

Roger Gibbon of the Navy Aviation Supply Office (ASO) was awarded \$750 for saving \$800,000 by finding an alternate source for engine shrouds.

Mark Opilla of ASO was awarded \$1,000 for saving \$1.9 million by finding an alternate source for flight refueling nozzles.

Disciplinary action taken as a result of poor procurement management practices at the Naval Training and Education Center included a letter of reprimand issued to a GS-15, the reassignment of a Navy Commander, and a letter of caution issued to a former commanding officer.

We do not have a list of names of Air Force personnel who received zero overpricing monetary awards during fiscal year 1983. However, data available to us indicates there were 75 such monetary awards totaling \$37,291 during that time. We have no record of my disciplinary actions. Normally this sort of disciplinary action is taken by local supervisors. Reports of such actions are not required to be forwarded to HQ USAF.

The following 32 DLA employees have received bonuses (\$100 each except as noted) since issuance of the 25 July 1983 Memorandum, subject: Spare Parts Procurement, by Secretary Weinberger:

Russel H. Van Allen
Angela M. Bogucki
Betty Y. Elam
Algie W. Frittro
George A. Griffith
Charles E. Jennings
Carolyn S. Jones
Lynn C. McCormick
Gerard D. Mignano (\$400)
Suzanne M. Miller
Lila M. Norris
William R. Rivard
Callie F. Shannon
Mary L. Studevant
Robert F. Warren
Edward G. West

Samuel E. Bland
Linwood Conti, Jr.
Robert E. Farris
Herbert F. Garrett
Angeline P. Harrison
Nancy M. Jimison
James H. Lee
Constance T. McNeill
Steven D. Montgomery
Richard M. Newbert (\$200)
Melvin E. Reames
Laura M. Shelton
Sarah C. Spain
Emily A. Todd (\$250)
Henry B. Webb, Jr. (\$200)
James H. Wilcox, Jr.

There have been no instances identified within DLA to date where disciplinary action was warranted.

Army has established a hot-line to enable Army personnel, both military and civilian, to report apparent cases of over-pricing. As calls are received, they are being investigated, and appropriate action will be taken to include bonuses or disciplinary action where necessary.

REFUNDS FROM CONTRACTORS

Senator LEVIN. Mr. Thayer, to buttress your comments with respect to Point 7 in the 10 point program, will you provide the committee with a list of the refunds received as of today from defense contractors over the last year? Please include the name of the contractor and dollar amount of the refund.

Mr. THAYER. Cases where refunds are appropriate are under investigation continually and the list of specific refunds is constantly changing. The Navy reports the following recent refunds: Westinghouse—\$3,000; General Electric—\$87,763; Pennwalt—\$6,300; Aerojet Electro Systems—\$3,271; Gould, Inc.—\$84,000; and Sperry Corporation—\$76,546.

On 31 August 1983, Secretary Orr sent letters to the top 35 companies doing business with the Air Force. The letters expressed deep concern on spare parts pricing. Some of the letters provided spare parts price examples and sought refunds. To date, 9 companies have provided refunds. Additionally, the Air Force has received two other voluntary refunds. Sargent-Fletcher, Inc. charged the USAF between \$143 and \$185 for F-15 center fuel tank bracket. The buying activity subsequently competed this item and found a fair price was under \$10. Sargent-Fletcher refunded \$56,805 and now charges \$6.90 for the item. Boeing Aerospace, Inc. refunded \$3,123 for plastic navigator stool caps for which they had overcharged.

Defense Logistics Agency (DLA) Centers routinely identify apparent overcharges and make recoupments on numerous purchase actions during the normal course of business. As the large predominance of DLA contracting is comprised of small purchases (not exceeding \$25,000), most recoupments fall below \$1,000 each. The following represent recoupments made in recent months on larger value purchases:

McGraw Edison Company	\$12,000.09
Sunstrand Aviation	12,309.80
British Aerospace	8,500.00
Cardion Electronics	5,220.00
Litton Industries	23,625.70
Torrington Company	27,180.40
Vought Corporation	10,810.80
Pratt & Whitney	23,274.00
P. F. Communications	11,820.50

Additionally, refunds will be sought whenever our reviews of past contracts indicate that overcharging occurred.

SASC HEARING ON SPARE PARTS MANAGEMENT

Senator LEVIN. Mr. Thayer, earlier this month, the long awaited President's Private Sector Survey on Cost Control study was released. In it the Commission outlines scores of concrete proposals for saving money in the Defense Department. I realize you are probably still studying the report, but could this committee be provided with a document that addresses each of the recommendations, one by one, with an official Department of Defense comment on how or whether each of these recommendations should be implemented?

Mr. THAYER. DOD has only received the final PPSSCC reports on DOD in the last few weeks, and is currently reviewing each recommendation in depth with the involvement of the Military Services and OSD. This will be followed by review and final decisions on DOD positions by the Secretary of Defense. Our preliminary analysis reveals that DOD agrees with about 70 percent of the PPSSCC recommendations. However, we feel that the savings estimates are seriously overstated. Our positions will be included in the fiscal year 1985 DOD budget submission along with specific proposals for congressional action as appropriate.

CULPRITS IN SPARE PARTS PRICE INCREASES

Senator LEVIN. Mr. Thayer, one of the widely viewed culprits in spare parts price increases has been "price redeterminable orders" or agreements in which the contract officer orders parts from a catalogue at catalog prices that can be "redetermined" upon delivery. The use of this type of contract has been blasted by the Inspector General's office, and it has been widely reported that Secretary Weinberger has ordered a ban on their further use.

However, we now hear that in the absence of the redeterminable order the Air Force has been issuing unpriced orders for spare parts. I am not sure this is what I would call an improvement.

Are you aware of the use of unpriced orders for spare purchases?

Mr. THAYER. Yes. We do use unpriced orders to obtain some spare parts, however, they are not a substitute for redeterminable contracts. The use of unpriced actions is not new nor has it been purposely expanded as a result of eliminating fixed price redeterminable contracts. We only use unpriced actions in those situations where it is impractical to obtain firm pricing in advance of issuance of an order. We have numerous management controls on the issuance of such actions and each order is firm priced as soon as practicable. In addition, each unpriced order must contain a monetary limitation on the Government's liability. With these controls, we believe that unpriced actions can prudently be used to fill time sensitive spare parts requirements.

PROPRIETARY DESIGNATIONS ON PARTS

Senator LEVIN. Mr. Thayer, what is the DOD position on the Air Force plan to refuse to recognize proprietary designations on parts that have been in use for five or six years? Will the DOD be recommending similar action to the Army and Navy? If not, why? If so, when?

Mr. THAYER. The Secretary of Defense has approved a deviation to the Defense Acquisition Regulation to allow the Services to negotiate contract data provisions, which, as appropriate, reduce contractor proprietary rights in data. Each of the Services have been given the flexibility to implement and assess new approaches. The Air Force is utilizing an approach which will require a 5-year limitation on proprietary rights in certain cases where there is bilateral agreement with the contractors concerned. We do not have enough experience at this time, however, to recommend implementation of this approach as DOD-wide policy. We will monitor Air Force experience with this approach and assess the issues. As you may be aware, proprietary data effects a relatively small percentage of our overall spare parts inventory. Additionally, we must recognize the fact that the DOD depends on access to hardware and software which, in many cases, has been developed at private expense. Some firms depend on limited rights or proprietary markings to protect their livelihood. We have no intent to arbitrarily preempt property rights properly vested in contractors without fair and reasonable consideration. We therefore intend to weigh all of the issues associated with this subject prior to developing any changes to the current policy on this subject.

1976 DOD SMALL PURCHASE MANUAL

Senator LEVIN. Mr. Thayer, I understand that the 1976 DOD Small Purchase Manual emphasizes how to price small value parts, past cost experience and visual and value analysis. According to Secretary Gilleece, "This guidance appears to have suffered from non-use . . ."

Will you provide me with a copy of this Small Purchase Manual by the end of this week?

Mr. THAYER. Copy of the manual is attached.

**ARMED SERVICES PROCUREMENT REGULATION
SMALL PURCHASE MANUAL**

31 MARCH 1976



DEPARTMENT OF DEFENSE

31 MARCH 1976

ASPM NO. 2

SMALL PURCHASE MANUAL

PREFACE

This manual is designed to provide day to day guidance to the small purchase buyer or purchasing clerk, particularly those individuals who have recently been appointed. It relates his position to the over-all procurement mission, analyzes his function, points out problem areas, and offers suggestions which, it is hoped, will make the job of executing small purchases less formidable.

This manual is designed to be useful to personnel in all Department of Defense purchasing operations. It is, therefore, necessary that the coverage be general in nature and address itself to basic principles and policy. It is not intended to replace the Armed Service Procurement Regulation (ASPR) which must be used in conjunction with the manual, Departmental implementation or local procedural instructions.

Copies of the ASPR Small Purchase Manual may be obtained by purchase from the Superintendent of Documents, Attention: Mail List Section, U. S. Government Printing Office, Washington, D. C. 20402.

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SMALL PURCHASE MANUAL

CHAPTER 1 — INTRODUCTION

A. Need for a Small Purchase and Other Simplified Purchase Procedures.

The foremost objective of small purchase and other simplified purchase procedures is to reduce administrative costs. Past Government surveys reveal that for 50% of all Government procurement actions, the administrative cost either equalled or exceeded the purchase price.

The Department of Defense purchasing activities are spending approximately \$46 billion a year. These procurement actions range in dollar value from multimillion dollar contracts to purchases of less than one dollar. Since it has been estimated that just the administrative expense of making a multiple award under a solicitation is \$100, it is readily apparent that, where possible, administrative costs must be held to a minimum. A closer look at statistics shows that in FY 75 almost 10 million actions were under \$10,000, representing an expenditure of approximately \$4.8 billion. If each of these actions were to cost \$100 in administration, the Department of Defense would be spending \$1 billion to buy \$4.8 billion worth of goods and services in the small purchase area alone, or \$20.84 for every \$100 spent.

Section III, Part 6 of the Armed Services Procurement Regulation prescribes small purchase procedures for all Department of Defense purchasing offices. This Manual only supplements the ASPR.

B. Small Purchase System.

The small purchase system is used to make purchases of less than \$10,000 which will involve the minimum administrative costs while assuring that the buy is in the best interest of the Government, price and other factors considered. These procedures shall not be used for inserting paid advertisements in newspapers and magazines (See ASPR Section IV, Part 8). These dollar limitations are different under certain circumstances, which will be discussed later.

1. How It Works.

Under the small purchase system, procurements are accomplished after oral or written solicitation, utilizing one of the methods outlined below and described in Chapter 3 C, below.

The system provides for four primary methods of purchase:

- (i) blanket purchase agreements (BPA);
- (ii) imprest funds;
- (iii) purchase orders using:
 - (A) DD Form 1155 and ancillary forms; and
 - (B) Standard Form 44 (Purchase Order - Invoice - Voucher);
 and
- (iv) U. S. Government National Credit Card.

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Other purchase procedures which may be effectively used for small purchases include delivery orders issued under indefinite delivery contracts (definite quantity contracts, requirements contracts, and indefinite quantity contracts) and orders issued under basic ordering agreements.

2. Procurement Authority.

Negotiation for small purchases is authorized by 10 U.S.C. 2304(a)(3) of the Armed Services Procurement Act. Section III, Part 6 of the Armed Services Procurement Regulation (ASPR) provides that purchases or contracts for supplies, nonpersonal services, and construction aggregating not more than \$10,000 may be made in accordance with the simplified purchase procedures prescribed therein. For construction small purchases, see ASPR 18-302.

3. Funding for Small Purchases.

Funding must be given first consideration in all aspects of procurement. It is a matter of law that no agent of the Government may incur obligations on behalf of the Government unless sufficient funds have been reserved in advance for a specific purpose. Under the small purchase procedures, the bulk funding concept is generally preferred. In bulk funding, the fiscal officer furnishes an authorization to the requisitioning activity or the contracting officer for the purpose of obligating funds on purchase documents against a specified lump sum of funds reserved for this purpose, in lieu of obtaining separate funds for each procurement. These funds may be utilized over a specified period of time.

4. Importance of a Reasonable Price.

The importance of obtaining reasonable prices cannot be overemphasized. Every individual participating in procurement must establish the objective of acquiring full value of every dollar expended. A high degree of dedication must be displayed by the buyer if the small purchase system is to be effective. Every person engaged in the program must demonstrate ability to use sound judgment and discretion in exercising the authority granted to carry out the small purchase program.

5. Procurement Responsibility.

The contracting officer is responsible for purchasing the required quantity and quality of supplies as specified on the purchase request in strict compliance with procurement regulations.

6. Irregular Procurement Actions.

It is readily recognized that there will be instances when because of the emergency of the situation or the urgency of the requirement, it will be necessary to commit the Government without prior written contractual agreement. With this in mind, the Congress in 1958 enacted Public Law 85-804, which grants "Extraordinary Contractual Relief" to contractors who are without any resource under other provisions of law for loss necessitated by acts of government agents.

Public Law 85-804 provides that nothing shall be construed to authorize the formalization of an informal commitment, unless the commitment was made at a time when it was impracticable to use normal procedures. It is therefore incumbent upon the person ordering or requesting supplies or services to be certain that it is impossible or impracticable to follow usual procurement procedures at the time the commitment is made. Should it later be found that normal procurement procedures could have been used and were not utilized, the individual mak-

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ing the commitment could become personally liable for the cost of the supplies or services furnished.

Unauthorized procurement actions not only incur potential financial liability for the individual, but also embarrass the Department of Defense in its dealings with firms unfamiliar with procurement laws and regulations. Neither a contracting officer nor an ordering officer is authorized to formalize an irregular procurement action by execution of a contract or purchase order after the fact.

C. The Small Purchase Buyer.

1. Importance of the Individual.

The small purchase buyer is an important part of the procurement team. He may be the only Government representative dealing directly with the vendor. He must find sources of supply, advise these sources of the Government's requirement, evaluate the quotations received, conduct negotiations, prepare appropriate documents, and recommend to the contracting officer that the purchase be made.

It must be understood that as a result of taking short cuts or simplifying procedures, there follows a need for authority and responsibility to be delegated to a greater number of people. This means that effective controls are more difficult to establish and administer. Related to small purchases, this means that the buyer or purchasing clerk occupies a most vital position as far as the Government is concerned. He or she is the individual who may have to make the ultimate "buy" decision, even while talking to the vendor on the telephone. Such decisions require sound judgment, based on experience and training, so that the best buy for the Government, price and other factors considered, can be made.

To be effective, a buyer should have a working knowledge of the products he is buying, the industry he is dealing with, and the Government regulations within which he must operate. While there are special Government courses designed to educate the buyer, much of the necessary information can be acquired only by experience on the job. A buyer must:

- (i) Be impartial in making awards. Care should be exercised constantly to avoid even the suspicion that one supplier was given an advantage.
- (ii) Treat information received in a highly confidential manner. All quotations received contain information that must not be disclosed prior to the award.
- (iii) Be alert at all times to possible means for reducing the administrative cost of procuring Government supplies and services.

2. Procurement Ethics and Standards of Conduct.

All persons engaged in procurement practices must constantly be on the alert to avoid a breach of ethics. DoD Directive 5500.7, dated 8 August 1967, as amended, prohibits DoD personnel from accepting any gift, gratuity, favor, entertainment, or any other thing of monetary value, either directly or indirectly, from any person, firm, corporation, or other entity which is engaged or is endeavoring to engage in procurement activities or business or financial transactions of any sort with any agency of the Department of Defense (see also ASPR 1-113).

SMALL PURCHASE MANUAL**3. Responsibility.**

A buyer is responsible to the contracting officer. In the performance of his duties, he should exercise common sense and seek advice from other members of the procurement team whenever necessary. The buyer is expected to familiarize himself with current operating procedures and policies.

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CHAPTER 2 — ORIGIN OF THE BUY

A. Supply Management.

The supply system is designed to provide the "user" activity or customer with those items of supply and service for which an authorized need exists. Supply management has the responsibility to determine at what level within the supply system the item will be acquired, that is, the decentralized (retail) level (base, camp, post or station), or the centralized (wholesale) level (inventory control point). The procurement system is designed to respond at either level.

Requirements which do not exceed \$10,000 for supplies and services will normally be purchased by small purchase procedures. The document by which the supply manager makes these requirements known to the purchasing activity is called a purchase request or "PR." (Other terms are sometimes used — purchase directive, purchase instruction, notice to purchase, traveling purchase request (TPR), or purchase requirement.)

B. The Purchase Request.

This document contains essential elements of information which may be broken down into administrative data and descriptive data.

Administrative data includes:

- (i) purchase authority;
- (ii) funding citation;
- (iii) requestor and address;
- (iv) delivery requirements (priorities);
- (v) estimated price of the item(s);
- (vi) other appropriate information; and
- (vii) signatures.

This information establishes the authority for the purchase to be made.

Descriptive data may include:

1. *Item Identification (Description).*

(a) *Procurement Identification Description.* The description will include the approved item name, military model number and such other descriptive material as will properly identify the item; it may include end item application.

(b) *National Stock Number.* This is a number assigned by a Federal agency for identification of supply items. These numbers are listed in Federal Supply Catalogs which consist of two parts, an Identification List (IL) and a Management Data List (ML).

(c) *Service Part Number.* This is a number assigned by a Military Service for identification of an item.

(d) *Manufacturer's Part Number.* This is a number assigned by a manufacturer for identification of an item. A vendor who does not manufacture an item may assign his own part number to an item purchased from a manufacturer.

2. *Specifications.*

Specifications are written descriptions of the technical and other requirements established for the supplies or services being procured. As a basic rule, specifications set forth only the minimum requirements for quality and construction of materials and equipment necessary for an acceptable product.

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Items for which there is a repetitive demand are described by standard specifications known as Federal Specifications and Military Specifications. On seldom-used items, a purchase description is used when it is impracticable or uneconomical to prepare a specification.

Federal specifications cover materials, products, or services used or expected to be used by any Federal agency. With a few exceptions, Federal specifications are concerned with commercial type items.

Military specifications cover materials, products, or services used mainly by the Military Departments. ASPR 1-1202 provides that, with certain exceptions, Federal and coordinated Military specifications which apply to the supplies or services to be procured must be used by the Department of Defense.

3. Drawings.

In the small purchase procurement of supplies and nonpersonal services, drawings may not always be furnished by the requisitioning activity because of the high administrative cost involved. However, when the buyer finds it necessary to have drawings, he should request them from the requisitioning or technical support activity.

4. Standards.

Standards may be industrial standards or military standards. Requesting activities are responsible for furnishing such standards when appropriate. The buyer may use them for review of adequacy of the item description and review by prospective quoters.

5. Other Descriptive Data.

This may include quantity, packaging and packing.

6. Summary.

This data establishes the qualitative and quantitative requirements of the item to be purchased. The format of the purchase request will vary between Departments and purchasing activities within Departments, caused by differences in administrative procedures as well as the degree of automation within the activity. Regardless of format, the essential elements of administrative and descriptive data must be present to permit the purchasing activity to do its job efficiently and economically.

The adequacy of the descriptive data, and particularly the item identification, which has been provided on the purchase request will determine the ease of recognition of the item by the buyer. The originator of the purchase request is responsible for furnishing this information. The buyer, however, must assure that he has been provided adequate descriptive data to know what to buy. Unless the buyer knows without a doubt what he is expected to buy, he must take appropriate action to see that the originator furnishes him the additional descriptive data required. There are times when the originator of the purchase request has not exhausted all resources known to him to provide adequate descriptive data, and it is well for the buyer to have some knowledge of these resources to know that the originator has done his job.

C. Sources of Descriptive Data.

To repeat, "ADEQUATE DESCRIPTIVE DATA IS THE RESPONSIBILITY OF THE ORIGINATOR OF THE PURCHASE REQUEST," but it is important for the buyer to know what information of this nature is available, and he

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should have an understanding of the format and use of such material. Government documents which contain information for item identification and descriptive data are:

1. *Federal Supply Catalog.*

The Federal Supply Catalog consists of those items of supply which have been introduced into the Federal Supply System. These items are listed by Federal Supply Class and contain an Identification List (IL) and a Management Data List (ML). The IL will contain that information appearing on the catalog card pertaining to item identification, while the ML contains supply sources and other management data. Information contained in the Federal Supply Catalog is also published on microfilm.

The Defense Logistics Service Center (DLSC) has available automated procedures to furnish any supply activity with current cross-reference data to identify a stock numbered item in the supply system from a manufacturer's part number.

2. *Cross-Reference Handbooks.*

Cataloging Handbooks H4-1 (Name to Code) and H4-2 (Code to Name) contain the Federal Supply Code for Manufacturers, United States and Canada. The ability to identify the manufacturer's code is an invaluable tool in that with it and the manufacturer's part number, DLSC can provide additional descriptive data or the manufacturer can be contacted for additional information in the form of commercial catalogs or other commercial literature providing descriptions and dimensions.

3. *Technical and Maintenance Publications.*

Each Service maintains numerous publications describing the technical operation and maintenance of items of equipment in the supply system, including identification of components and parts by National Stock Number and other descriptive details.

4. *Federal and Military Specifications and Standards.*

The Department of Defense Index of Specifications and Standards (DODISS) provides a ready reference to specifications and standards and designates the activity which was responsible for the preparation of the specification. Such activities are valuable sources of information, should questions arise concerning the specification or items of supply meeting the requirements of the specification.

D. *Noncataloged, Nonstocked, or Commercial Type Items.*

Requirements for noncataloged, nonstocked, or commercial type items will frequently lack adequate descriptive data, and the requestor may not have access to any additional descriptive data. In these cases, the buyer must depend upon the efforts of the entire logistical team (engineers, technicians, industrial specialists) to provide additional data. Suppliers themselves may often be of assistance in these cases.

E. *Screening.*

The buyer's job has just begun. Upon receipt of the purchase request, he must first screen it to assure that he has a "Valid" purchase request, citing the correct authority, upon which to take purchase action. While there may have been prior review or screening, he must make sure that the document contains all

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administrative and descriptive data (as previously mentioned) so that he knows what he is buying and how he should make the buy. In other words, he must know that he has all the information required to prepare the solicitation, evaluate the quotations, and issue the purchase order.

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CHAPTER 3 — PREPARATION FOR SOLICITATION

During its processing from the originator to the buyer, the purchase request passes through numerous control and review points to assure that the buyer will receive a *valid* purchase request.

The buyer must, however, perform his own personal review to assure that he has (and understands) the administrative and descriptive data required to proceed with the planning and execution of the purchase action. The buyer's experience in purchasing and familiarity with the item to be purchased will dictate the extent of his review and the time required for its accomplishment. Any deficiencies that are noted should be corrected *NOW* — corrective action at this point can save the Government both time and money, as well as save the buyer numerous problems later.

Once the buyer is satisfied that he has all necessary information at hand, he is ready to proceed with his job to prepare for the buy.

A. Evaluation of the Purchase Request.

There are many decisions which will have to be made by the buyer. His experience and judgment will determine, to a large degree, the success of the buy, considering the needs of the customer, advantages to the Government, and relationship with the vendor. Some of the elements of the purchase request which should be evaluated are as follow:

1. Priority / Delivery Date Consideration.

The purchase request will contain a priority number indicating the urgency of the need for the item and a required delivery date (RDD). Priorities 01 through 06 are considered high priority requirements. In addition, other special project requirements may also be considered high priority requirements. In these instances the most expeditious method of procurement should be utilized.

A higher priority item should be given preference over a lower priority item. Where priority numbers are identical, preference should be given to the earlier required delivery date shown on the purchase request.

Time is money. Of primary consideration is the time frame in which the customer will need the item. High priority items should be sufficiently justified since expedited handling and delivery costs will be reflected in the ultimate price that will be paid for the item. The customer naturally wants his requirements filled as soon as possible.

Every effort should be made to establish a delivery date which will provide sufficient time to permit:

- (i) the Government to properly prepare solicitations;
- (ii) prospective suppliers to adequately compile relative facts bearing on price submittals in offers or quotations;
- (iii) Government personnel to adequately examine and negotiate quotations;
- (iv) the contractor to employ normal work force and manufacturing processes; and
- (v) use of normal modes of transportation. (Premiums may be necessary to insure timely receipt when using air freight, air mail, or other expedited modes of transportation.)

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2. *Inspection and Acceptance Considerations.*

Inspection and acceptance may take place as follows:

- (i) inspection and acceptance at destination;
- (ii) inspection at origin and acceptance at destination; or
- (iii) inspection and acceptance at origin.

Generally, in small purchase procurements, inspection and acceptance shall be at destination. In many cases, at the post, camp, or station level, acceptance will consist merely of a certification of count and receipt. (ASPR 14-308.) Exceptions to this basic policy are when source inspection would be more practical and economical to the Government, (ASPR 14-305.2(a) or (b)), for example:

- (i) disassembly or destructive testing is required;
- (ii) special test instruments, gauges or facilities required, are located at source;
- (iii) costly packing and packaging would be destroyed;
- (iv) in process quality assurance is required; or
- (v) supplies requiring technical inspection are destined for direct overseas shipment.

3. *F.O.B. Point Considerations.*

Generally, solicitations for supplies for ultimate delivery within the United States should be made on an F.O.B. (free on board) destination basis. Supplies shall be delivered, all transportation charges prepaid by the contractor, to the specified destination(s) (ASPR 19-104.2).

For material intended for overseas delivery, the F.O.B. point will normally be destination, either POE or APO number, although inspection and acceptance is at origin or is by certification, such as is permitted under fast pay procedures or in accordance with ASPR 14-306.

When the destination is not known at time of solicitation, the solicitation should be on an F.O.B. origin basis (ASPR 19-208.4).

4. *Dollar Value of Procurement.*

The estimated dollar value of the purchase request will be reviewed in order to determine the method of solicitation and purchase to be used.

5. *Quantitative Evaluation.*

The purchase request will state the quantity of each item that is required by the originator, but this quantity may not be compatible with commercial and manufacturing standard packaging practices. There is also the possibility that the originator has split his requirement to maintain a dollar value not exceeding \$10,000 for a single purchase, as evidenced by the submission of two or more closely spaced purchase requests by the same originator for the same item. Regulations prohibit this practice to avoid the use of formal advertising (ASPR 3-603.1(b)).

Factors which must be evaluated when considering the quantity of an item to be purchased are:

(a) *Standard commercial packaging.* When the purchase request reflects a quantity by count or weight differing from the standard, the originator should be contacted to determine if the requirement cannot be adjusted to the standard pack, which will usually reflect an overall price saving.

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(b) *Consolidation of requirements.* Quantity discounts are normally offered as a commercial practice, and therefore lower prices can often be obtained when requirements for the same or similar items from different originating activities can be consolidated into a single purchase transaction.

(c) *Minimum order dollar value.* Suppliers, particularly at distributor and wholesale levels, sometimes establish a minimum dollar value either on the total order or on each line item of the order. Requirements which do not meet the established minimum order dollar value will require locating retail commercial sources or adjustment of the quantity to meet the dollar value when justified. The originator of the request should be contacted to determine if the minimum order quantity may be purchased in anticipation of future requirements.

6. *Prospect of Competition.*

In the purchasing function, competition is normally said to exist when two or more qualified sources of supply compete independently and on an equal basis for the Government requirements. The objective of competition is to assure that the procurement will be made to the best advantage of the Government, price and other factors considered. The number of sources solicited shall be consistent with the procurement of the required supplies or services but should not jeopardize the quality and timely delivery requirements. The extent of competition shall be as outlined in ASPR 3-604.

The purchase request will be reviewed to ascertain whether it indicates that the item is susceptible to competitive procurement, by listing several known sources of supply, or is a "sole source" or "source controlled" item.

Except for "source controlled" or valid "sole source" items, adequate competition should be sought. Although the purchase request so indicates, a buyer cannot always assume that the only potential sources are those listed thereon. He must use his experience and the facilities available to him to determine that in fact the item is sole source.

Items which have a wide usage factor in commercial as well as the military market and are produced by a number of individual manufacturers will tend to have an established or going market price. Market competition has established reasonable prices. Examples of commodities which generally fall into this category are piping and plumbing supplies, building supplies, and hardware, office supplies, foodstuffs, and automotive parts and supplies. Adequate competition should not be difficult to obtain under these circumstances.

Complex and specialized items which have limited application or usage on the market and with few suppliers are often subject to wide price variations as well as availability, and far greater care must be taken to assure that adequate competition is obtained. The extreme case, of course, is where there is only one supplier of the item. In these instances, the buyer is faced with a situation of no competition, and he must then rely on other than competition to obtain a reasonable price by further negotiation. (See also Chapter 4, Paragraph 4.)

7. *Brand Names.*

The term "brand name product" means a commercial product described by brand name and make or model number or other appropriate procurement identification description by which such product is offered for sale to the public by the particular manufacturer, producer, or distributor. Purchase descriptions

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which contain references to one or more brand name products followed by the words "or equal" may be used for small purchases (ASPR 1-1202(b)). Suppliers shall be suitably informed that quotations on products different from the products referenced by brand name will be considered only if the contracting officer determines that such offered products are equal in all significant and material respects to the products referenced. When only one item will fulfill the requirement, the term "or equal" will not be used.

"Brand name or equal" purchase descriptions should reflect those salient physical, functional, or other characteristics of the referenced products which are essential to the needs of the Government (ASPR 1-1206.2(b)).

Purchase requests should be reviewed to ascertain that they comply with the above requirements.

B. Source Selection.**1. Governmental Sources.****(a) General Services Administration.*****The Federal Supply Service.***

The Federal Supply Service, a part of the General Services Administration, was set up to purchase on a Government-wide basis. The Federal Supply Service uses three methods to distribute supplies: the stores stock depots, the Federal Supply Schedules, and the consolidated purchasing program.

Stores Stock Depots (ASPR Section V, Part 2).

The Federal Supply Service has a system of ten regional depots, which store and issue supplies to Government agencies much as a military depot does. Items designated for local purchase must be procured from the appropriate GSA depot unless the delivery requirements cannot be met. (See also (c) below.) In this event, local purchase from commercial sources may be used.

The GSA periodically publishes a Stores Stock Catalog, which contains a list of the items stocked at various depots and price information on some of the supplies listed. DD Form 1348 shall be used to order supplies from the depots. Normally, the supply activity places orders with GSA stores depots in accordance with Departmental instructions; however, when the buyer suspects this source has been overlooked, he should check with supply.

Federal Supply Schedules (ASPR Section V, Part 1).

Because of the costs involved in maintaining a Government storage and distribution system, the Federal Supply Service makes use of commercial distribution facilities for many items. The indefinite delivery contract is used to take advantage of the economies of consolidated buying and also to use commercial distribution systems. Under this system, the Federal Supply Service lets annual indefinite-delivery contracts to supply the Government with certain items. Using agencies of the Government then place delivery orders directly with the contractor under the terms of these contracts.

Federal Supply Schedules are booklets published to inform ordering offices about the items covered by annual contract. They also give the price, terms, contractors' names and addresses, contract numbers, and other necessary information. Some schedules also make reference to contractors' catalogs. In addition to the schedules, which are published for each class purchased in this fashion, a checklist is published to show the status and applicability of the various

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schedules. The schedules, catalogs, and checklists can all be obtained from the GSA regional offices (see ASPR 5-203).

There are three types of coverage under these schedules: mandatory, non-mandatory, and optional. The Department of Defense must fill its needs for items covered by mandatory schedules by ordering against the annual contracts, and the contractor must fill all orders from mandatory schedules. The only exceptions are (i) when the order is less than the minimum order specified by the schedule (usually \$25), (ii) when the order or a rapid series of orders from the same office is greater than the maximum specified by the schedule (this varies from schedule to schedule), (iii) when the Federal Supply Schedule contractor cannot supply the item in time to meet the required delivery date, and (iv) when a special requirement must be met and the scheduled articles will not meet it (this requires notification to GSA). Examples of mandatory items include tires and tubes, electric lamps, furniture, and dry batteries.

In addition to the mandatory Federal Supply Schedules, there are other schedules mandatory for use by one or more civilian agencies of the Government, but not mandatory on the Department of Defense. Nonmandatory Federal Supply Schedules become mandatory on DoD for items decentralized for local purchase when all of the following conditions are met (see ASPR 5-103): (i) the Schedule or the contractor's price list identifies the item by Federal stock number, (ii) delivery requirements can be met; and (iii) the order is within the minimum and maximum limitations of the Schedule. Exception from the foregoing is permitted only where the contracting office has actual knowledge that the purchase can be made more advantageously to the Government from a source other than the Supply Schedule. The contracting office shall not solicit quotations or otherwise test the market for comparison with the Schedule price. Where a procurement from a source of supply other than the nonmandatory Schedule indicates that such source might be more advantageous to the Government as a general source, the name and address of the supplier, together with other details of the procurement action, shall be forwarded to the General Services Administration through the Regional Office of the GSA region in which the procuring activity is located.

In addition to the mandatory and nonmandatory Federal Supply Schedules, there are completely optional Federal Supply Schedules (see ASPR 5-104). The buyer should compare the prices and other terms under optional schedules with the price and other terms offered by other commercial sources and then make the purchase that offers the Government the best terms. Schedules that are optional for ordering offices are also optional for contractors; the contractor may accept or reject any order placed under such a schedule. Normally, orders will not be placed under optional schedules when (i) better terms are available elsewhere, (ii) changes in specifications are anticipated, (iii) technical inspection is required, or (iv) special packaging, packing, preservation, or marking is necessary (as for overseas shipment).

There are three ways to determine whether the schedule for a particular class is mandatory or optional: check ASPR 5-102.3, which lists the mandatory schedules; read the Federal Supply Schedule checklist, which tells the coverage of each schedule; and look at the first inside page of each schedule, which usually explains the status of the item listed.

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Delivery orders for supplies or services under Federal Supply Schedule contracts are placed on DD Form 1155 (see ASPR 5-105); oral orders not in excess of \$10,000 may also be placed, and the imprest fund used, in accordance with ASPR 5-107. The ordering activity is responsible for inspection, shipment (when the basis is F.O.B. origin), payment, and contract administration. When supplies are defective, the ordering agency requests a price adjustment and notifies GSA. If the contractor does not perform, the ordering activity can terminate the individual order for default, but cannot start termination proceedings against the GSA contract itself. Before terminating an order, the ordering activity should send a "show cause" request, and, if the delay is excusable, should not terminate. The GSA decides any conflicts that arise over the assessment of excess costs as a result of default terminations. Federal Supply Schedules do not provide for termination for convenience (but see ASPR 5-108(d)).

Procurement of Utility Services (ASPR Supplement No. 5 and ASPR Section V, Part 8). To coordinate the purchase of electricity, gas, steam, sewerage, and water among Government agencies, the General Services Administration enters into indefinite delivery contracts with various utility companies in a certain area. These area contracts provide that on receipt of a proper order as specified in the agreement, the contractor will furnish the service involved, at established rates. Use of the contracts is mandatory, unless more advantageous competing services are available. Special rates or services may be negotiated under a GSA area contract or under a separate contract when it is in the best interests of the Government. Determination of the best interests of the Government should be based on a consideration of (i) the magnitude of the service required, (ii) any unusual characteristics it may have, (iii) technical contract provisions required, or (iv) other special circumstances.

To place an order under an area contract, the purchasing office follows the method outlined in the appropriate GSA Public Utility Schedule (obtainable from the Public Utilities Division of GSA in Washington, D.C.) The ordering form, however, can be altered to meet local requirements, including the addition of any necessary contract clauses. A certified rate schedule which is needed to administer payments should be provided by the purchasing office to the cognizant financial officers and the General Accounting Office, who will audit the monthly vouchers.

If a GSA contract is not available or it cannot be used, resort must be had to procedures established in ASPR Supplement No. 5, *Procurement of Utility Services*, and implementing Departmental procedures. Under certain circumstances, where the contractor's rates are regulated by a public body (Federal, state, or otherwise), procurement may be made without a written contract. This does not hold true, however, when (i) the supplier requires a contract, (ii) there is a connection charge, or (iii) a contract would be advantageous to the Government. ASPR Supplement No. 5 prescribes when a written contract is necessary, sets forth Utility Service Contract formats, specifications, special and general provisions and the procedures for securing authority for deviations. Resort to Departmental implementation is essential.

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(b) Federal Prison Industries (ASPR Section V, Part 4).

Federal Prison Industries, Inc., is a wholly-owned Government Corporation established by Congress in 1934. Federal Departments and agencies are required to purchase the products and services of the industries operated by the Corporation which are available and meet the procurement agency's requirements.

Federal Prison Industries, Inc., issues a schedule of products and services made or performed in Federal penal and correctional institutions, divided into sections by class of products. Each section contains a current price list and clearance instructions pertinent to that class of product. Buyers should familiarize themselves with the schedule, and are encouraged to utilize the facilities of Federal Prison Industries, Inc., to the maximum extent practicable in the procurement of supplies which are not listed in the Schedule, but which are nevertheless of a type which could be manufactured in Federal penal and correctional institutions.

Federal Prison Industries, Inc., issues two types of clearances, "general" and "formal" clearances when classes of articles or services are not available. A copy of each general clearance is forwarded to the Department of Defense for dissemination to the Military Departments. A purchase order / delivery order written pursuant to a general clearance need not be supported by a copy of the clearance, but the clearance number must be cited on the order.

Formal clearances are issued in response to requests initiated by procuring activities or installations desiring to procure from agencies for the blind or from commercial sources, supplies of the type listed in the Schedule and not covered by a general clearance. A copy of the clearance certificate must be attached to the copy of the order furnished the finance office.

Orders should be placed in accordance with ASPR 5-406.

(c) Procurement from the Blind and Other Severely Handicapped (ASPR Section V, Part 5).

Under the Blind-Made Products Act of 1938, as amended by Public Law 92-28 dated 23 June 1971, all Federal Departments and Agencies are required to purchase those products and services listed in the "Procurement List" published by the Committee for Purchases from the Blind and Other Severely Handicapped. Products which are listed in the Federal Prison Industries schedule must be obtained from the Federal Prison Industries. ASPR 5-502(a) provides instructions for obtaining copies of the "Procurement List." Buyers should familiarize themselves with the schedules which list various items by Class and National Stock Number.

Orders for supplies which have been decentralized for local purchase shall be submitted to the GSA Stores Depot which can best serve the purchasing activity, except that when one of the conditions stated below is present, procurement shall be through the National Industries for the Blind (See ASPR 5-504.1):

- (i) supplies require overseas packaging or packing;
- (ii) supplies are required in carload lots;
- (iii) location of the purchasing activity makes it more practical and economical to procure from the agency for the blind or other severely handicapped;
- (iv) the "Procurement List" indicates that the supplies are not stocked by GSA Stores Depots; or
- (v) delivery requirements cannot be met.

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When procuring supplies from the Blind and Other Severely Handicapped, a letter request for allocation should be submitted directly to the appropriate central nonprofit agency listed in the "Procurement List" issued by the Committee for Purchases from the Blind and Other Severely Handicapped, who will notify the purchasing activity of the name and location of the workshop or agency where the delivery order will be placed.

(d) *Printing Services and Supplies (ASPR Section V, Part 6).*

There are two types of Government printing requirements; departmental and field. Departmental requirements are those for general use in a department regardless of the place of origin. The procurement of all printing, reproduction services, and equipment by Federal agencies is governed by the Joint Congressional Committee on Printing; all printing and reproduction must be done in accordance with its regulations. The regulations provide that all departmental printing must be procured from the Government Printing Office (GPO). GPO may, however, grant clearance for purchases elsewhere. Field organizations are ordinarily served by field printing plants. But if such plants cannot perform the necessary printing service, it may be procured from commercial sources.

The Federal prisons have printing facilities available for field work. The use of these printing services is not mandatory; but they should be used whenever it is advantageous to the Government.

2. *Commercial Sources.*

(a) *Type of Supplier.*

In the small purchase area, the buyer must evaluate the advantages and disadvantages of dealing with local or retail sources of supply as opposed to wholesale, distributor and manufacturing sources of supply. Evaluation of the dollar value and quantity involved in the individual purchase, as well as delivery, may well determine the preferable category of suppliers that should be solicited.

Additional factors to be considered in source selection by type of supplier are:

- (i) availability from supplier stock;
- (ii) proximity of supplier to user;
- (iii) price protection and distribution practices within the industry; and
- (iv) commercial warranty and service capability of supplier.

(b) *Previous Suppliers.*

A record containing names of suppliers for items previously purchased should be maintained. This record will serve as a ready reference for like or similar items for future purchase. These records may be maintained by National Stock Numbers or by nomenclature, whichever is more convenient.

Bidders' lists will be developed and kept current within an installation including, in addition to previous suppliers, firms which have submitted applications for such inclusion. Where purchasing activities maintain a central index of procurement history, or utilize machine print-outs, buyers should utilize such references to the fullest extent. Generally, the requisitioner will furnish the names of previous suppliers, if available, with the procurement request.

(c) *Commercial Business Directories.*

Many registers and directories listing manufacturers, vendors, suppliers, industries, commodities, products, localities, etc., are published. All purchasing of-

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fices should obtain publications pertinent to their areas of procurement to enlarge their sources of supply.

(d) *Microfilm Systems.*

Microfilm systems are produced by commercial sources. They consist of microfilm viewers and reels of microfilm which reproduce commercial catalogs of various product lines. The producers of the microfilm generally update the film periodically.

(e) *Trade Journals.*

These journals are issued periodically by various trade associations and contain current information about products and their manufacturers.

(f) *Catalogs.*

Suppliers' catalogs are valuable aids to the buyer for source selection. These catalogs usually contain pictures of items, descriptions, manufacturers' part numbers and sometimes price lists. Various industries publish other catalogs, such as the Radio Electronic Master Catalog and the Electronic Engineer's Master Catalog (EEM). In addition, catalogs covering various industries are published.

(g) *Yellow Pages.*

The "yellow pages" of the telephone directory serve as a convenient source for locating suppliers within the local area of the procurement office and should be checked.

3. *Foreign Sources.*

It is DoD policy that purchases from foreign countries be held to an absolute minimum, principally to reduce the gold flow from the United States. Policies regarding this subject vary depending on the country of origin. To control the purchase of foreign made items and aid the Balance of Payments Program, every effort must be made to buy items of domestic manufacture. Specific items whose purchase is prohibited and those whose purchase is authorized are listed in ASPR Section VI. Prior to initiating procurement action for an item of foreign manufacture, a determination must be made that the item is not available from a domestic source and that purchase from a foreign manufacturer is both authorized and required. In the case of purchase made from Federal Supply Service Schedules, it is the responsibility of the purchasing activity to comply with the Buy American Act (see ASPR 6-102.3).

4. *Qualified Products Lists.*

A qualified products list (QPL) is a special category of commercial sources which are mandatory in nature. Qualified products lists identify manufacturers whose items have been subjected to tests and found to satisfy all requirements of the applicable specifications. Such items are known as "Qualified Products." Where a specification requires such qualification, only qualified products may be supplied to the Government (ASPR Section I, Part 11).

5. *List of Debarred, Suspended and Ineligible Firms and Individuals.*

A list of debarred, suspended and ineligible firms and individuals is maintained in the purchasing office. It is mandatory that all buyers check this list prior to solicitation and award of any procurement (ASPR Section I, Part 6).

6. *Small Business Set-Asides.*

ASPR 1-706 provides for the exclusive participation of small business firms on certain procurements of designated items of supply when it is determined

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to be in the interests of (1) maintaining or mobilizing the Nation's full productive capacity, (2) war or national defense programs, or (3) assuring that a fair proportion of business is placed with small business concerns. The determination to "set-aside" a total procurement for small business is made by either the Contracting Officer unilaterally, or jointly with the Small Business Administration Representative for the purchasing activity.

C. Selection of Purchase Method.

1. *Considerations.* The choice of a particular purchase method will depend on such factors as dollar value, type of item, delivery requirements and availability. Selection of the appropriate purchase method can best be made by a "filtering-process" by which each method is evaluated in turn until it is determined which will be the most suitable method for the immediate requirement and will result in the greatest economy and efficiency.

2. *Filter-processing.* It is incumbent upon the buyer to know the applicability and limitation of each small purchase method and simplified procedure. The more experienced buyer will be able to evaluate the immediate purchase and quickly determine the purchase method to be used. He, however, will have used a mental filtering-process by which he has made his selection. The less experienced buyer may find it necessary to establish a check list which outlines the applicability and limitation of each method and use this check list to assure himself that he makes the proper selection.

Review of purchasing activities have disclosed that mistakes can and have been made in this area. A typical example of this is the issuance of a purchase order to a supplier with whom a blanket purchase agreement has been already established. This type of situation increases the administrative workload and negates the efforts spent in establishing the BPA.

3. *Blanket Purchase Agreements (BPAs) (ASPR 3-605).* The BPA method is generally considered to be an easy method for making a small purchase and is commonly referred to as the "Charge Account" method. Its use is very similar to that of a personal charge account. A BPA is not a contract which is binding on either party. The buyer is not restricted to soliciting BPA holders only. Where there are an insufficient number of BPAs for a particular class of item to insure adequate competition, the buyer should solicit additional sources.

Advantages of a BPA are:

- (i) reduces administrative lead time;
- (ii) reduces administrative workload due to the need to issue only one formal procurement document over a year's period of time and the consolidated monthly billing aspects;
- (iii) allows procurement personnel to ascertain the amount of business given to a particular contractor since all "Calls" and dollar amounts are maintained in the BPA record;
- (iv) proper utilization improves vendor relations in that the above advantages will also apply to the contractors.

4. *Imprest Funds (ASPR 3-607).* An Imprest Fund is a petty cash fund, advanced by a disbursing officer to an authorized cashier to effect immediate cash payments of relatively small amounts for authorized purchases.

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5. *Purchase Orders (ASPR 3-608)*. The purchase order method employing the DD Form 1155 is used extensively in most procurement offices. The purchase order is an offer by the Government to pay for *future* delivery or performance by the supplier, which can be withdrawn by the Government at any time until it is either accepted in the form of writing or by the beginning of performance. The ASPR clauses that are used in a purchase order are restricted to those on the DD 1155 and DD 1155r and those referenced in 3-608.2(b). Purchase orders are prepared in accordance with ASPR 3-608.2 which spells out the requirements in detail. This method of purchasing is limited to \$10,000. This limitation includes (upward) variation in quantity and transportation costs for F.O.B. origin shipments if such costs are to be prepaid by the contractor and to be charged to the Government. Solicitations may be oral or written. A record of quotations solicited and received shall be included in the purchase file. If the buyer determines that it is necessary to effect a binding contract, such as in a MAP purchase, the contractor should be required to sign DD Form 1155r which is made part of the order.

6. *Basic Ordering Agreements (BOAs) (ASPR 3-410.2)*. This is an agreement between the Government and a specific supplier which contains all the terms and conditions required of a contract in excess of \$10,000 and normally includes a list of the supplies/services to be furnished and a description of the method for determination of prices.

A BOA is not normally issued for the purpose of covering small purchase actions, however, they are authorized to be placed against these documents by order and should be utilized if available and appropriate.

7. *Delivery Orders (ASPR 3-608.6)*. A delivery order for supplies or non-personal services may be issued without monetary limitation:

- (i) under indefinite delivery type contracts issued by Department of Defense activities (see 3-409);
- (ii) under Federal Supply Schedules;
- (iii) to order from Federal Prison Industries, Inc., Schedules; and
- (iv) to order from National Industries for the Blind.

DD Form 1155 is used for delivery orders; DD Form 1155r is not made part of the order.

8. *Unpriced Purchase Order (ASPR 3-608.3)*. An unpriced purchase order is an order for supplies or services, with prices not established at the time of issuance of the order.

9. *Standard Form 44 (ASPR 3-608.9)*. Standard Form 44, a Purchase Order - Invoice Voucher, is a multipurpose form which can be used as a purchase order, receiving report, supplier's invoice and public voucher.

10. *U.S. Government National Credit Card (ASPR 3-609)*. The U.S. Government National Credit Card (Standard Form 149) is normally issued to drivers of vehicles who are contemplating trips to various locations off the installation and who may be required to purchase gasoline, oil, etc. To obtain payment, the contractor submits his invoice to the motor vehicle transportation officer who matches delivery tickets against invoice and certifies to their propriety. Any discrepancies in the contractor's invoice will be resolved by a contracting officer.

11. *Fast Pay Procedures (ASPR 3-606)*. The fast payment procedure is designed to reduce lead time to the consignee and to improve supplier relations

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by expediting payment for small purchases. It is especially useful for purchase consigned to remote locations when receiving reports are impractical to get.

The procedure provides for payment for supplies based on the contractor's submission of an invoice which constitutes a representation that the supplies have been delivered to a post office, common carrier or point of first receipt by the Government, and that the contractor agrees to replace, repair, or correct supplies not received at destination, damaged in transit, or not conforming to the purchase agreement. Title to the supplies is vested in the Government upon delivery to a post office or a common carrier for shipment to the specified destination or upon first point of receipt by the Government when shipping is by other means.

D. Soliciting Quotations.**1. Oral Solicitation.**

Quotations for small purchases shall be solicited orally unless existing conditions require written solicitation as indicated in 2, below.

2. Written Solicitation (ASPR 3-604 and 3-608.2(c)).

Written solicitations should generally be used only where the suppliers are located outside the local area, special specifications are involved, a larger number of items are included in a single proposed procurement, or obtaining oral quotations is not considered economical.

Two forms provided for written solicitation are Standard Form 18 and DD Form 1155. Other forms such as TWX, letters, or approved automated forms may be used.

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CHAPTER 4 — EVALUATION, NEGOTIATION & AWARD

A. Evaluation of Quotations (ASPR 3-608 2(c)).

When quotations from suppliers are received, the buyer must consider several factors prior to recommending an award.

1. Exceptions to Specifications.

When a supplier's quotation takes exception to the specifications, the buyer should refer the matter to his technical personnel for resolution.

2. Exceptions to Terms and Conditions.

Certain terms and conditions of a request for quotations are required by statute or regulation and may not be waived.

Whenever a supplier's quotation takes exception to the terms and conditions of the request for quotation, the matter should be referred to legal personnel for guidance.

3. Promised Delivery Date(s).

Whether oral or written, the solicitation should stipulate the latest date by which the supplies are required at destination. Efforts in negotiating the purchase order should be with this goal in mind. If no single supplier can meet the delivery date, then the buyer should negotiate the best delivery date consistent with the prices offered. It may be necessary to coordinate this with the requisitioning activity. For example, one supplier may offer an item for \$10.00 within 30 days and \$20.00 within 15 days. Contact with the requisitioning activity may reveal that the item must be received within the 15-day time frame. This, of course, then becomes an important evaluation factor. If, on the other hand, the requisitioning activity can live with a 30-day delivery, by all means make the order for the 30-day period, but always bear in mind that the buyer should offer all competing suppliers the same opportunity.

4. Pricing.

The ASPR Manual for Contract Pricing (ASPM No.1) is issued for the guidance of personnel engaged in the analysis and negotiation of contract prices. It is applicable to both small and large procurements.

For every procurement, the contracting officer must decide as to the fairness and reasonableness of the price he is going to pay for a product or a service. The obligation to contract at fair and reasonable prices does not diminish as we move down the scale from multi-million dollar contracts for systems acquisition to the nickel and dime item prices for nuts, bolts and screws.

What is fair and reasonable? Fair and reasonable describes a conclusion as to price. The term signifies that the price is acceptable to both the Government and the seller, but the validity of the buyer's decision that a price is fair and reasonable will depend on the factors he looked at and how he evaluated them in reaching this conclusion.

The conclusion that a price is fair and reasonable must be based on some form of analysis. Price analysis is a broad term which includes in its meaning whatever actions are taken by the buyer to reach a price decision, without recourse to cost analysis. As a general rule, price analysis can do the job on relatively small dollar procurements of supplies or services; there should be little need

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to use cost analysis. How detailed this analysis is will depend on the dollars and the nature of the product or service being purchased.

Some of the actions (not in any preferential order) a buyer may take, what kind of information he uses as a basis for his decision, and how and where he gets the information are listed below:

(a) *Availability of Price History.*

Price history may be obtained from the following sources:

- (i) records of the requisitioning activity;
- (ii) records of the purchasing activity; and
- (iii) records of the technical activities.

(b) *Validity of Price History.*

A price previously paid should not be accepted as a basis for determining that the offered price is reasonable unless it can be determined that the previous award was based on adequate competition or some other valid method of establishing that the price was reasonable.

(c) *Adequacy of Competition.*

Adequate competition exists when offers which are responsive to all requirements of the solicitation are received from at least two responsible offerors who acted independently and whose prices are not so far apart as to necessitate a conclusion that they are not truly competitive. Adequate price competition is presumed to give a fair and reasonable price.

(d) *Catalogs.*

An established catalog price is one included in a catalog, price list, schedule or other publication regularly maintained by the manufacturer or vendor, published or otherwise available for inspection by customers, and one at which sales are currently, or were last, made to a significant number of buyers who constitute the general public. An established published catalog may be used by a buyer for evaluation of prices for an award. Buyers should consider catalog prices as list prices from which suppliers commonly offer significant discounts. Unpriced catalogs containing pictures of items help the buyer to know what he is buying and thereby assist him in evaluating the reasonableness of the price.

(e) *Established Market Prices.*

Established market prices are those which are recognized as price ranges for particular commodity groups which are prevalent throughout the industry. For example, many firms manufacture pipe elbows, glass panes, ordinary nuts and bolts, etc. It is very easy to establish a reasonable price for these items. We should extend this medium, however, to include the more technical type items. Before saying that an item is sole source, a concerted effort should be made to determine other manufacturers who make either the same or similar type items and use these prices as a basis for comparison. Certain basic commodity or material prices may be found in daily newspapers or in other media.

(f) *Similar Items.*

Similar items may be listed in the catalogs of many suppliers. A comparison of prices for these items may establish the reasonableness of a quoted price, either by direct comparison or by an analysis of the differences. The same sort of comparison can be made between the price of a military item and the seller's catalog price for a commercial counterpart.

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(g) Value Analysis.

Knowledge of the product and its functions, the use to which it is to be put, is essential for sound contract pricing. Value analysis is a method which, when applied to price, is intended to establish a concept of the value of the product. More precisely, value analysis is a systematic and objective evaluation of the function of a product and its related costs in order to ensure optimum value. Effective use of value analysis as a pricing tool should give an insight into the inherent worth of the product.

(h) Visual Analysis.

This term identifies an approach which is related to but which should not be identified with value analysis. The term describes a visual inspection of an item or the drawings for it in order to come up with a ballpark estimate of probable value. It is more clearly related to the value analysis survey in that you are concerned with answers to questions about the obvious, external features.

(i) Independent Government Cost Estimate.

When other methods of price comparison of small purchases are not possible, an independent Government cost estimate may be prepared within the purchasing activity. An offered price may then be compared with this estimate to establish reasonableness.

(j) Engineering / Cost Analysis.

Since the objective of the small purchase procedure is to reduce administrative cost and lead time, engineering / cost analysis, which is time consuming and costly, should be avoided, but may be utilized when the circumstances of the procurement justify it.

(k) Trade Discounts.

A trade discount is a reduction in price from the original list price.

An example:

List price	\$100.00
Trade discount (20%)	-20.00
Selling price of item	\$ 80.00

Trade discounts vary widely between segments of industry and buyers should be familiar with the particular practices of the trade with which they are doing business. A trade discount is not to be confused with a prompt payment discount, which is discussed later.

(l) Contractor Minimum Billing Policies.

Where a contractor has a minimum billing policy, the buyer should find out what quantity can be obtained for the minimum price. This information should be referred to the requisitioner to determine what action should be taken.

(m) Quantity Breaks.

A "quantity break" is a reduction in unit price for a specified larger quantity. A typical example is:

ITEM	TYPE NO.	1-99	100-999
DIODE	IN 717	\$2.10	\$1.60
DIODE	IN 718A	\$2.53	\$1.90
DIODE	IN 745A	\$4.35	\$3.37

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Obviously, sometimes it would be in the best interest of the Government to increase the quantity to take advantage of the quantity break price. When the requisition quantity approaches a break point, the requisitioning activity should be alerted to the possibility of savings and the advisability of increasing the quantity discussed.

(n) Prompt Payment Discounts.

Prompt payment discounts are discounts offered by a supplier in order to induce early payments after deliveries have been made and accepted. Any prompt payment discount offered will be considered in evaluation of the quotation unless the discount period is less than the minimum specified in the solicitation. In any event, the discount becomes a part of the award, and will be taken if payment is made within the discount period. All orders containing prompt payment discounts should be stamped on the face sheet with the word "*DISCOUNT*" to alert the payment office.

B. Negotiation.

Good pricing and effective negotiation develop a good purchase order. Pricing is a judgment area. Good prices cannot be produced by formula or by computer. Pricing is an integral part of procurement and a buyer's job.

Fundamentally, a buyer must understand what is meant by "pricing" and "negotiation." Pricing refers to determination of fair and reasonable prices for the timely delivery of the desired quality and quantity of required supplies and services. Negotiation refers to a process of bargaining between buyer and supplier. The objective is to reach understanding and agreement on all terms and conditions of the order, including the work to be done and price to be paid for that work.

In small purchases, negotiation may consist of letters, messages or telephone calls. Regardless of the means used to communicate, every negotiation requires planning. An informal plan or list of discussion points is indispensable for conducting an effective negotiation. Issues should be identified. The buyer should ask himself: Are there issues that can be traded off if necessary? How realistic is the delivery schedule? Can it be extended? In some cases, where lead-time is less important, suppliers can produce in an extended period at a lower price.

If price reduction is needed to make a quoted price fair and reasonable, an advance decision should be made about the reduction desired. A vague statement that the "price is too high" represents a weak approach. A price reduction request must be positive, plausible, and businesslike. The buyer should discuss his problem with other buyers who have had prior experience with the supplier, with price analysts, or with his supervisor. Small purchase negotiations should be concise and direct and do not warrant complex treatment.

C. Award.*1. Combining Awards.*

When several awards are contemplated to the same vendor, they should be combined into a single award unless there is some valid reason for not doing so. The aggregate amount of the purchase order may not exceed \$10,000, including any authorized variations in quantity and separate charges, such as for transportation, permitted by the order to be stated separately in the invoice.

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2. Contractor Acceptance (ASPR 3-608.4).

There are two methods by which the contractor can accept a small purchase order. One is by actual performance and the other is by written acceptance. Normally, written acceptance is not obtained. However, on some small purchase orders such as MAP or classified purchases, ASPR has a positive requirement that each order will be accepted in writing by the contractor on DD Form 1155r. By signature on the DD Form 1155r, in addition to formally accepting the order, the contractor also agrees to additional terms and conditions, including the unilateral right of the Government to order certain changes and to terminate the order for convenience or default. Should any question arise as to whether a contract in fact exists, legal counsel serving the activity should be consulted.

D. Documentation.

It should be remembered that every contract file must contain the necessary documentation to support the action taken.

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CHAPTER 5 — POST AWARD ACTIONS AND ADMINISTRATION

A. Follow-up and Expediting Procedures.

Inasmuch as small purchases are usually administered by exception, expediting does not often come into play. When it does, however, it can be just as important as any large purchase. There may be a small purchase for a critically needed repair part. In these instances, the same attention to expediting is applied as that to large purchases.

B. Modification of a Purchase Order (ASPR 3-608.4).

Where the Additional General Provisions 17 through 20 on DD Form 1155r are part of the purchase order by virtue of the contractor's signature on that form, the contracting officer may direct changes pursuant to the Changes clause, Additional General Provision 17. Where the Additional General Provisions have not been accepted by the contractor, changes may be made only by mutual agreement.

C. Termination of a Purchase Order (ASPR 3-608.5).

There are three ways in which purchase orders may be terminated.

1. Cancellation, Withdrawal, or Rejection.

A purchase order is an offer by the Government to buy, and the vendor is not obligated to perform until he accepts, at which time a binding contract is created. Prior to acceptance, the Government may cancel or withdraw the purchase order.

2. Termination for Default.

(a) *Government's Rights.* When the purchase order contains the Termination for Default clause, the Government has the contractual right to terminate the order, in whole or in part, for failure of the contractor to perform any of the provisions thereof.

(b) *Contractor's Rights.* In accordance with the Disputes clause of the purchase order (General Provision 5), the contractor has a right to appeal from the contracting officer's decision to terminate the order for default.

3. Termination for Convenience.

(a) *Government's Rights.* When the purchase order contains the Termination for Convenience clause, the Government has the contractual right to terminate the order, in whole or in part, whenever it is in its best interest.

(b) *Contractor's Rights.* The contractor has the right to be compensated in accordance with the Termination for Convenience clause. When termination is contemplated, advice should be obtained from legal personnel.

D. Documentation.

It is the responsibility of the buyer to assure that the contract file contains adequate documentation to justify his actions. Such data shall include, where appropriate:

1. *Procurement Request.*
2. *Funding.*
3. *Quotation(s) and Evaluation(s).*
4. *Award and Justification.*
5. *Delivery.*
6. *Inspection / Acceptance.*
7. *Payment.*

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APPENDIX A

DECISION LOGIC CHART FOR PRICING SMALL PURCHASES
AND
PRICING MEMORANDUM

A-100 Scope of Appendix. This Appendix contains a suggested format for a Decision Logic Chart for Pricing Small Purchases (Exhibit A) and a Small Purchase Pricing Memorandum (Exhibit B). The purpose of these Exhibits is to assist small purchase buyers in determining price reasonableness and providing documentation therefor. Use of Exhibit A is optional.

A-101 General. All purchases shall be made at reasonable prices considering the circumstances of the individual purchase. A price reasonableness determination shall be made for every procurement and, when appropriate, documentation therefor included in the procurement file. (See ASPR Section III, Part 6).

A-102 Decision Logic Chart for Pricing Small Purchases. To assist buyers in establishing a reasonable price, the Decision Logic Chart for Pricing Small Purchases (Exhibit A) may be utilized in every small purchase. The chart presents a step-by-step price analysis process, in required sequence. Buyers should follow this sequence only to the step at which it can be determined that a reasonable price has been offered. Every purchase does not require processing through the entire sequence. It is expected that, in the majority of procurements, a reasonable price can be established at an early step. Narrative instructions explaining how each step should be performed are as follows:

- (i) If solicitation results in adequate price competition, document the file and award. Notwithstanding this paragraph, verification of a low bid by reference to price history is desirable whenever such information is available.
- (ii) If solicitation results in a quotation which is considered reasonable based on the price history, or a previous procurement with competition, or a history of award to more than one supplier, document the file and award.
- (iii) If a current commercial price catalog, list, or other advertised pricing data is available, compare offered price with the published catalog or other pricing data for comparable quantities, after adjustment for any trade or other discounts allowed:
 - (A) If price is considered reasonable, document the file and award.
 - (B) If price is considered too high, negotiate a reasonable price, document the file and award.
- (C) In procurements made pursuant to priorities 01-03 in which a reasonable price cannot be established pursuant to (i) through (iii) above, the contracting officer should continue to apply the provisions in (iv) through (ix) below, or should submit the matter to at least one level above the contracting officer for decision as to whether award should be made without further price review, based on the urgency of the need.

A-1

ARMED SERVICES PROCUREMENT REGULATION

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- (iv) Review available Interchangeability and Substitutability (I&S) data for an equivalent or similar item carrying an alternate NSN. If an alternate item is found:
 - (A) Review price history data for the alternate NSN item to determine if a reasonable price was established through:
 - (I) adequate competition;
 - (II) commercial catalog prices;
 - (III) price analysis and negotiation; or
 - (IV) cost analysis and negotiation.
 - (B) If the offered price compares favorably with the price of the alternate NSN item, document the file and award.
 - (C) If the offered price is unreasonable, but negotiation results in a reasonable price, document the file and award.
- (v) Review item characteristics as described in the "Federal Item Identification Card" (DD 146), or any available drawings for comparison with a similar item whose price is established as reasonable (see (iv)(A) above). Should a similar item be found for comparison, proceed as instructed in (iv)(B) and (C) above.
- (vi) Where a sample of the item is available and a reasonable price can be estimated by physical examination of the item:
 - (A) Award if offered price compares favorably.
 - (B) If the offered price is unreasonable, but negotiation results in a reasonable price, document file and award.
- (vii) Forward the Purchase Request with all available drawings to the element furnishing technical support requesting an evaluation of the essential characteristics / requirements of the item and a report on their effect on the price. This may present such factors as complexity in manufacturing, high scrappage rate due to special requirements, high cost materials such as precious metals, critical application requiring extra quality control, or similar information on the cost of producing the item which may aid in determining a reasonable price.
- (viii) Contact the offeror for:
 - (A) A description of the item, including any special features that would affect price.
 - (B) Any pricing information the offeror can supply (other than cost data).
 - (C) If sufficient information is supplied to establish a reasonable price, document file and award.
- (ix) If the foregoing steps do not result in a determination that the price is reasonable, the case will be referred to the Chief Officer responsible for procurement for decision whether to award at the offered price or refer to the inventory control element for validation of the requirement.

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A-103 Price Reasonableness Documentation. The Pricing Memorandum (Exhibit B) should be used to document price reasonableness of small purchases when required by ASPR 3-604.2. Instructions for completion of the Pricing Memorandum are in ASPR 3-604.2.

A-104 Pricing Techniques in the Absence of Adequate Price Competition.

(a) The technique of comparing the items to a similar competitive or catalog item offers the best assurance of fair and reasonable pricing in small purchases. In the majority of cases under \$10,000 involving noncompetitive and noncataloged items, this method should be employed to determine price reasonableness. It is not necessary to locate an identical item or to compare every feature of the two items. Quantity, packaging and other factors must be considered in arriving at an independent estimate of a reasonable price for the individual procurement. Abstracts of bids maintained by the purchasing office may be useful in this regard. Commercial catalogs and price lists should also be used.

(b) Visual examination of warehouse samples, drawings and/or DD 146 descriptions can be of considerable value in determining that a price is fair and reasonable. Often the actual manufacturer is revealed by this examination. Sources solicited will include any manufacturer(s) revealed by visual examination.

(c) When other methods available to procurement personnel are unproductive, assistance by the element responsible for technical support should be obtained for use as a factor in the buyer's pricing determination.

A-105 Purchases Not in Excess of \$500.

(a) Purchases not in excess of \$500 will be accomplished in accordance with ASPR 3-604.1.

(b) Documentation of price reasonableness on these purchases is not required, however, care should be exercised to ensure that pricing is the best possible and that prices are fair and reasonable under the circumstances of the procurement.

A-106 Purchases in Excess of \$500. Purchases in excess of \$500 will be accomplished in accordance with ASPR 3-604.2.

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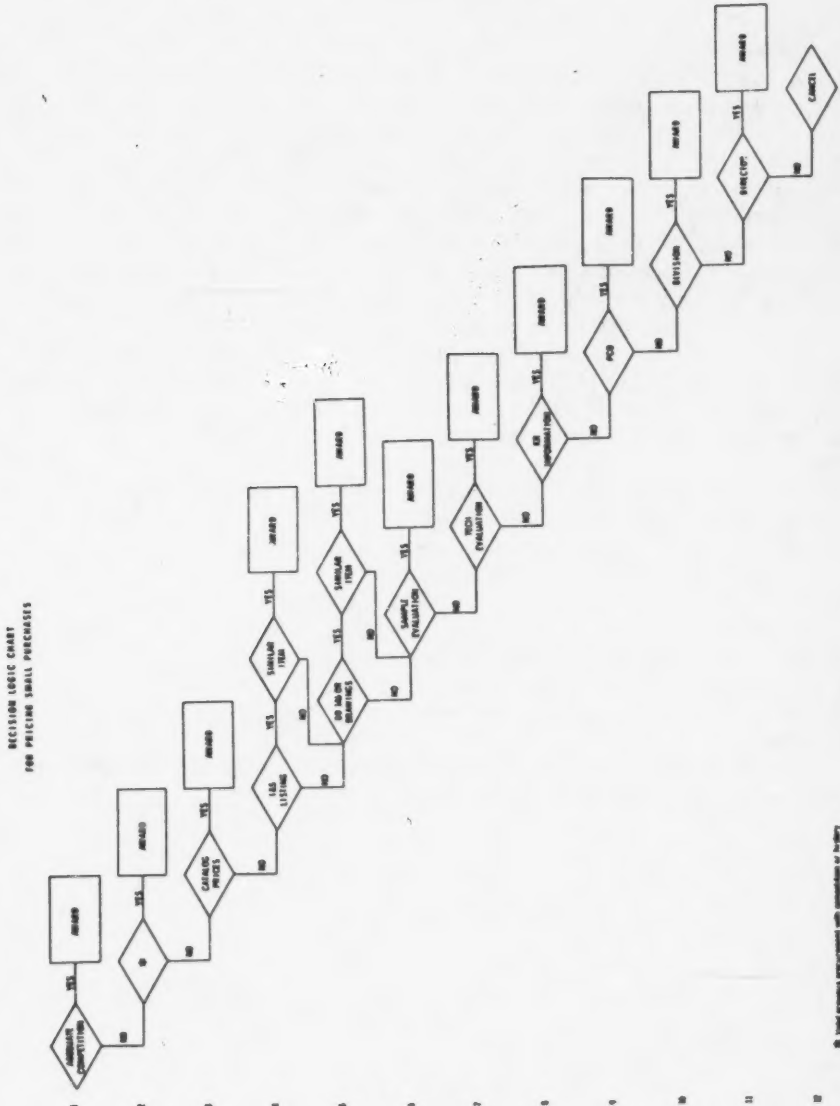


EXHIBIT A

A-4

ARMED SERVICES PROCUREMENT REGULATION

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DD Form 1784: Small Purchase Pricing Memorandum

DEPARTMENT OF DEFENSE SMALL PURCHASE PRICING MEMORANDUM (This form may be completed in longhand)	
PURCHASE REQUEST OR PURCHASE ORDER NUMBER	
A. PRICE REASONABLENESS BASED ON (check one or more):	
☐ COMMERCIAL CATALOG/PUBLISHED PRICE LIST NUMBER _____ DATE _____ PAGE _____	
☐ ESTABLISHED MARKET PRICE: MEANS OF VERIFICATION _____	
☐ COMPARISON WITH PRIOR PURCHASE OF SAME OR SIMILAR ITEM: VENDOR _____ ORDER NO. _____ DATE PURCHASED _____ QUANTITY _____ UNIT _____ UNIT PRICE _____ BASIS FOR DETERMINING PRIOR PRICE REASONABLE _____	
☐ VALUE ANALYSIS BY BUYER/USER/TECHNICAL PERSONNEL (incl. review of technical data, examination of sample, etc.) (Specify): _____ _____ _____	
☐ OTHER (set forth specific reason, e.g., valid purchase request estimate, minimum order quantity, high priority and delivery, special packaging/marketing): _____ _____ _____	
B. REASONS FOR SOLICITING ONLY ONE SOURCE _____ _____ _____ _____ _____	
SIGNATURE OF BUYER	DATE

DD FORM 1784
1 NOV 70

EXHIBIT B

A-5

ARMED SERVICES PROCUREMENT REGULATION

PROCEDURES INSTITUTED BY COMMANDS

Senator LEVIN. Mr. Thayer, are you aware of a July 29, 1983 letter from General Don Keith, Commander of the Army's Material Readiness Command to General Max Thurman, the Vice Army Chief of Staff, in which General Keith states, "Each command will institute a procedure for reconciling any apparent increase in price for an item of 25 percent or more during a period of 12 months or less?" The Army and General Keith should be commended. This letter essentially calls for implementation of the Levin amendment nearly two weeks before it was signed into law, and some 8 days after it was offered by myself and Senator Cohen on the floor of the Senate. Do you intend to recommend similar action by the Navy and Air Force prior to implementation of the required regulations?

Mr. THAYER. We have already emphasized to the Services, by Secretary of Defense memoranda of July 25 and August 29, 1983, the requirement to avoid paying unreasonable prices. Section 1215 of the DOD Authorization Act requires that by January 22, 1984, the Secretary of Defense shall issue regulations setting forth certain limitations on the purchase of any spare part or replacement equipment. We have drafted a proposed regulation to implement this requirement. It is currently being considered by the Defense Acquisition Regulatory Council.

Senator TOWER. We thank each of you for coming today. It has been a very productive hearing.

I would reiterate what Senator Nunn has said. When you have recommendations to make the system work better, we hope you will not hesitate to give us your views on that. Also, where you think you require additional legislation in regard to the problem of overpricing of spares or any cost overrun problems, we hope you will recommend them to us.

If there are no further questions, the hearing is recessed until tomorrow morning.

Mr. THAYER. Thank you.

[Whereupon, at 3:35 p.m., the committee adjourned, to reconvene at 10 a.m., Thursday, Oct. 27, 1983.]

SPARE PARTS PROCUREMENT FOR THE DEPARTMENT OF DEFENSE

THURSDAY, OCTOBER 27, 1983

**U.S. SENATE,
COMMITTEE ON ARMED SERVICES,
*Washington, D.C.***

The committee met in open session, pursuant to notice, at 10:13 a.m., in room SR-222, Russell Senate Office Building, Senator John Tower (chairman) presiding.

Members present: Senators Tower, Thurmond, Warner, Nunn, Levin, and Bingaman.

Staff present: James F. McGovern, staff director and chief counsel; James G. Roche, staff director for the minority; Alan R. Yuspeh, general counsel; Brenda K. Hudson, assistant chief clerk; George K. Johnson, Jr., David S. Lyles, Bruce D. Porter, Patrick L. Renahan, Carl M. Smith, and James C. Smith, professional staff members; Drew A. Harker and Douglas R. Graham, research assistants; and Tamara L. Farnsworth, staff assistant.

Also present: Dennis P. Sharon, assistant to Senator Goldwater; Ron Kelly, assistant to Senator Humphrey; Jim Dykstra, assistant to Senator Cohen; Hank Steenstra, assistant to Senator Quayle; Patrick McKim, assistant to Senator Wilson; Guy Copeland, assistant to Senator Warner; Ed McGaffigan, assistant to Senator Bingaman; and Ralph White, assistant to Senator Levin.

OPENING STATEMENT BY SENATOR JOHN TOWER, CHAIRMAN

Chairman TOWER. The committee will come to order.

This morning the committee meets to continue its examination of the Department of Defense spare parts pricing controversy.

Yesterday we heard from the Department of Defense Inspector General's Office, from the General Accounting Office and the Office of the Secretary of Defense.

Today it is our pleasure to welcome several very distinguished members of industry who have agreed to provide their views on this very important issue. These gentlemen represent a broad cross section of the manufacturing industry and have been kind enough to accept the committee's invitation to appear today to share their thoughts on the spare parts acquisition process.

We are very pleased to welcome Mr. Art Wegner, president of Pratt & Whitney Co., and Mr. Donald White, president of Hughes Aircraft Corp.

Following the questioning of these witnesses, we will hear from Mr. Bruce Hahn, governmental affairs manager of the National Tooling and Machining Association, and from Mr. Vincent Kearns, the president of B. H. Aircraft.

Gentlemen, it is a pleasure to have you with us this morning and we look forward to your testimony.

Before we proceed further, I will yield to Senator Bingaman for any comments he may wish to make.

Senator BINGAMAN. I don't have any comments, Mr. Chairman. I am looking forward to the testimony.

Chairman TOWER. Gentlemen, you may submit your entire statements for inclusion in the record and summarize them in an oral presentation. I would suggest that procedure unless you feel more comfortable to read the entire statement. I leave it up to you. You may proceed as you see fit.

We will incorporate any statements you have or any supporting material and data in the record.

Our first witness this morning is Mr. Wegner.

STATEMENT OF ARTHUR E. WEGNER, PRESIDENT, PRATT & WHITNEY GROUP, UNITED TECHNOLOGIES "

Mr. WEGNER. Mr. Chairman and members of the committee.

I have submitted my testimony for the record and will summarize it.

I am Art Wegner, president of Pratt & Whitney. We are a major supplier to the Defense Department and build and support the engines for the F-14, F-15, F-16, and other military aircraft.

We help support 20,000 Pratt & Whitney military jet engines in the field today and currently do about \$700 million a year in spare parts business with the Government.

There is no question that Government and industry have got to work together to find ways to improve the process of acquiring spare parts. Any system can be improved, especially one that has suffered for years from lack of adequate funding, antiquated systems and too few well-trained and skilled people.

A point made by senior Defense Department officials. The sensationalism attached to the issue reflects only superficial analysis and basic misunderstanding of the process. I hope it does not lead us rushing into change just for the sake of change.

Secretary Weinberger's recent initiatives in this area provide a guide for all of us.

Helping to improve the Defense Acquisition Process Command is top priority throughout Pratt & Whitney. Pratt & Whitney's business is flight propulsion, so I will confine my remarks to that field.

As we weigh changes, we must be concerned first and foremost about flight safety and system reliability.

We also must be concerned about reducing the overall cost of acquiring weapon systems and support, not just the cost of a few individual parts. In reducing these costs we have to be sure not to overcomplicate the process.

I am confident that we can find ways to reduce cost. We have some history that supports my confidence.

In the early 1970's Pratt & Whitney began building F-100 fighter engines for the F-15 after a long and difficult competition. In 1973, 10 years ago, the Government bought the F-100 engine for a little over \$2 million each in then year dollars.

Last year the price of the F-100 was \$2.3 million, only 13.8 percent more than in 1973. In the same 10-year period the Consumer Price Index rose 117 percent.

We were able to manage that kind of performance principally because of two factors, productivity improvement and high stable volume production.

Since 1977 prices for F-100 spare parts rose an average of less than 6 percent a year or a total of only 39 percent, and paralleled the engine price.

In that same period our parts price increase for all our military engines have been below the Department of Commerce's industrywide rate for aircraft engines and parts. The Commerce Department index rose 81 percent. Our parts across-the-board rose 62 percent.

So far this year spare parts prices to the Government for all four products have increased by an average of only 1.8 percent. Importantly, though, parts for the high volume F-100 engine showed a decrease in price by an average of almost 1 percent.

But there are many justifiable reasons for price increases. In many cases a part in question has been out of production for 10 or 20 years or more.

As I said earlier, there are 20,000 Pratt & Whitney military engines in the field today and a lot of them are out of production.

B-52's, for example, in many cases use eight J-57 engines which we began delivering in 1951. We haven't produced the J-57 since 1965, but we still support those engines with spare parts.

When the Government orders an out-of-production part, it means Pratt & Whitney or the original supplier, if still in business, has to start from scratch in obtaining tooling and setting up machines to make it.

Price estimates have to be used. Both the company and the military customer understood that the starting point estimate was not necessarily the final price or actual price.

Here is another example. Much publicity has been given to the \$17.59 unit price for an engine bolt. Eighty-three of these bolts were delivered in 1982. It had last been purchased by the Government nearly 20 years ago in a quantity of 1,200 for 67 cents each. If the Government had ordered 1,200 of these bolts for delivery in 1982 instead of just 83 bolts, the price would have been \$2.30 each, not \$17.59.

A good analogy is the price you would have to pay for this morning's Washington Post if yours was the one and only copy printed. That newspaper would have cost many thousands of dollars, not just a quarter. It is the 747,000 copies a day that help keep the price down.

Parts procurement is a very complex subject. There are many things to take into account. When comparisons were made, did auditors look at the relationship of quantity to unit price? Were the data used to make the comparison valid? In the case of the widely publicized draft report by the Inspector General, the answer is "No".

The Inspector General says that in some cases the data were flawed and faulty. Were materials available? Did we have to make new tool-

ing to produce a few parts? Was the original manufacturer who had the know-how still in business? Did the customer require expedited effort which cost more?

I could go on and on.

My point is that just comparing two sets of figures is meaningless. You have to get behind the figures. One of the reasons we are all here today is that in many cases nobody bothered to get behind the figures.

Now, there is a growing cry for everyone who thinks defense spending could be cut substantially if spare parts were procured differently. The cry is "breakout."

The argument goes that the prime contractor is merely a conduit for the parts, driving up the price by adding handling charges.

The idea of breakout is good and we support it. If you can buy a part from one of Pratt & Whitney's suppliers and save money and still get the same value, it makes good sense to do it and certainly encourage it. The concept is sound, but it is not simple.

I believe breakout should be applied selectively, not across the board.

As you will hear later, we are working effectively with our military customers to achieve breakout where practical and we have had some excellent results.

Pratt & Whitney is much more than a middleman in the Government's procurement of parts built by our suppliers and ordered through us. We deliver an array of services of value to the Government and the costs of these services are reflected in the prices negotiated with the Government.

Last year the Government bought 7,000 different parts from us in more than 20,000 separate transactions.

I would like to use our F-100 engine as an example. It has thousands of different parts produced by 257 different suppliers. In the course of our day-to-day business our purchasing department deals with all of these suppliers.

Our engineers work with them. Our quality control people and expeditors are in their plants. In most cases there is more than one source so that we can competitively procure the parts.

We inspect parts. We inspect parts to be sure they meet the military specifications to insure the same quality the Air Force or Navy had in the engine when they originally bought it.

We help manage the flow of parts in the subassemblies and assemblies. We make sure the right parts get shipped so that they ultimately get to the right depots and overhaul shop on time.

We help the services forecast their requirements. Our technicians are on site in their depots at their bases, aboard their ships.

One of the most important services we provide is quality assurance on all our parts including those we purchase from our suppliers.

We have more than 3,000 people directly involved in quality assurance. Our suppliers cannot duplicate the full extent of our quality control capabilities and neither can the Government in the near-term because it is a system that is based on years of experience and data.

The Government needs our assistance, both in identifying and resolving field problems before they become catastrophic.

We participate in field incident investigations to feed back quickly any design changes necessary. We are there when you need us.

Another important value that we add is maintaining and supporting a highly competitive base of subcontractors.

The Government and Pratt & Whitney report separately on competitive procurement and on awards to small and minority business.

Thus, when the Government states that 90 percent of all procurements are sole source, we have to disagree. We see 60 to 65 percent on a dollar basis being placed sole source with Pratt & Whitney, and in the case of the F-100 we estimate that only 45 percent of the spare parts dollars are being placed with Pratt & Whitney.

Furthermore, the Government does not identify the competitive subcontracting by Pratt & Whitney and other prime contractors. Nowhere has the combined effort been reported that we are aware of.

About half of the money that comes to Pratt & Whitney is spent competitively with our suppliers and about 30 percent of that goes to small and minority business.

These are facts that don't show up in the Government reports on competition.

Another service that we provide that is a significant value added is traceability of parts. What would happen to fleet readiness, say, if there were a failure of a major component in an engine, maybe a disc over at Bitberg where the Air Force flies F-15's?

If the Government bought that part from a supplier or a couple of suppliers, under breakout, it would have lost the traceability and configuration control provided now by Pratt & Whitney.

So, what happens to the fleet? Those F-15's could stay on the ground while the Air Force works to find out where the disc came from and what happened to it.

That, gentlemen, could be a very costly situation and seriously impact Air Force mission readiness.

A value that is often overlooked, but is extremely important to the military, is our spare parts warranty. We provide warranties for all parts we sell. If the customer has a problem with our part, we take care of it.

The price of one of our parts covers not only the cost of the part itself, but of all of these services, and if someone in the Government has a problem, he only has to pick up the phone and dial one number and that is ours.

This is the value I am talking about. The Government needs these services. It needs us to develop and maintain qualified suppliers, to have our people on site, both at our suppliers and wherever the military service is needed.

The Government needs our technical assistance in solving inservice problems and in maintaining fleet readiness. It needs to have part traceability and configuration control for critical parts to isolate problems without grounding the fleet.

It also needs the warranties we provide to back up what we do.

If the prime contractors don't provide these services, the Government would have to make other arrangements to get them. They probably would cost more any other way.

As it is now, the Government has neither the manpower, skills and knowledge nor the budget required to get the job done another way.

Now, let me be more specific on the subject of breakout. We have been helping to improve the Government's ability to breakout parts.

In 1982, for example, we identified 1,400 F-100 parts that could be broken out and procured competitively and provided an additional 5,500 parts for the Air Force's TF-30, J-57, and J-75, and TF-33 engines for breakout.

For the Navy's J-52's and TF-30's, we have identified 1,500 parts that can be broken out. Right now we are reviewing another 2,000 parts for the Navy.

In total, we have identified more than 7,500 parts for breakout in the past 2 years.

In addition, Pratt & Whitney already has committed hundreds of millions of dollars in advance procurement of engines and spare parts for known Government requirements when the system under which the services are funded does not allow them the money to protect their leadtimes, that 12- to 24-month period between the time they have to order and when they get the hardware needed to keep the aircraft flying.

The Government can't provide us the money for this. We commit our own and when we do, we are not under contract and that means considerable financial risk.

In essence, we protect Government program schedules with company money until Government funding becomes available.

A couple of years ago there was another hearing before the Congress. It focused on concern over system readiness, the adequacy of America's defense and industries' base and its ability to surge in times of national emergency.

We all acknowledged then that the system was wanting. The new procurement initiatives probably will reduce the already limited surge capability that exists today.

The procurement system does need overhauling. We have to take a disciplined approach to implementing the new initiatives. We have got to be cautious and exercise control as we make improvements, but we all must be careful not to implement changes before the resources are in place and ready to function effectively.

There aren't any easy answers, but I think there are some things that can be done that will help and we have recommended them to the military services.

First, let's establish and procure economic ordering quantities so that the Government gets the lower prices from larger production runs.

Second, let's procure selected spare parts on a multiyear basis. This also means lower prices through larger orders, more efficient use of industrial resources, and planning benefits to both the suppliers and the Government.

Third, let's procure the initial provision of spares as services buy their engines, again on a multiyear basis. Lower prices would result because of the larger production line.

Fourth, let's have the Government buy out spares for older engine models jump as the J-57, J-58, and J-75, engines still needing support in the field, but long out of production. Then there won't be need to buy very small quantities year after year, and less chance of repeating the problem of procuring only 83 bolts.

Finally, we as prime contractors have a responsibility to assist Government procurement agencies to break out more spare parts. This is

particularly true of those parts where risks are limited, where they are not critical to the safe functioning of the engine.

Together the Government and we in the defense industry have faced many difficult and complex problems. I have no doubt that the current national perception of a parts pricing problem is one of the most serious we have ever had to confront.

As a taxpayer, I am very concerned about cost increases incurred in almost every sphere, not just in defense spending by the U.S. Government.

We at Pratt & Whitney are proud to be part of the national security system and we are proud of our record. I pledge to you our best efforts to help insure improvements in spare parts acquisition.

Thank you, Mr. Chairman. That concludes my presentation.

[The prepared statement of Mr. Wegner follows:]

PREPARED STATEMENT BY ARTHUR E. WEGNER, PRESIDENT, PRATT & WHITNEY GROUP, UNITED TECHNOLOGIES

I'm Arthur E. Wegner, president of Pratt & Whitney. We are a major supplier to the Defense Department, and build and support the engines for the F-14, F-15, and F-16, and many other aircraft. We help support 20,000 Pratt & Whitney military jet engines in the field today, and currently do about a 700 million dollars a year in spare parts business with the government.

The issue of spare parts is of tremendous importance to the Department of Defense and to industry alike. I'm sorry to say, however, that it's become a much more controversial issue than it should be.

All of us—government and industry—have lost a lot of credibility with the American people about the job we're doing. Spare parts procurement is an extremely complex issue, which very few have the time or inclination to understand fully.

That's where we in industry have to do a better job in keeping you and the public informed about the job we've done over the years and of our plans and progress to improve our performance.

There's no question that government and industry have got to work together to find ways to improve the process of acquiring spare parts. Any system can be improved, especially one that has suffered for years from a lack of adequate funding, antiquated computer systems, and too few well-trained and skilled people, a point made by senior Defense Department officials.

The sensationalism attached to the issue in many cases reflects only superficial analysis and a basic misunderstanding of the process. I hope it doesn't lead us rushing into change just for the sake of change.

Secretary Weinberger's recent initiatives in this area provide a guide for all of us.

Helping to improve the defense acquisition process commands top priority throughout Pratt & Whitney.

But, we as industry, and the Defense Department, as the government's representative, must proceed in an informed, disciplined and rational way.

Frankly, I have some real concerns as we look to improve the way spares are acquired. Our nation's defense system is at stake. We've all got to avoid making mistakes that could compromise our defense readiness.

Pratt & Whitney's business is flight propulsion, so I'll confine my remarks to that field. As we weigh changes, we must be concerned first and foremost about flight safety and system reliability. They are absolutely essential to the integrity and readiness of our national defense, let alone to the lives of our pilots and aircrews.

We also must be concerned about reducing the overall cost of acquiring weapon systems and support—not just the cost of a few individual parts. In reducing these costs, we've got to be sure not to over-complicate the process—again, so as not to compromise weapon system safety, reliability, readiness, or effectiveness.

We have to make sure the costs in the broadcast sense really go down.

I'm confident we can find ways to reduce costs. We have some history that supports my confidence.

In the early 1970s Pratt & Whitney began building the F-100 fighter engine for the F-15, after a long and difficult competition. In 1973—ten years ago—the government bought the F100 engine for a little over \$2 million each in “then year dollars”—or the dollars actually spent in a given year. That \$2 million price was fully negotiated and was considered reasonable.

Last year, the price of the F-100 was two-point-three million dollars—only thirteen-point-eight percent more than in 1973. In the same ten-year period, the Consumer Price Index rose 117 percent.

We were able to manage that kind of performance principally because of two factors: productivity improvements and high volume production.

Since 1977, prices for F-100 spare parts rose an average of only five point six percent a year, or a total of only 39 percent, and paralleled the engine price.

In that same period, our parts price increases for all of our military engines have been below the Department of Commerce's industry-wide inflation rate for the high-volume F-100 engine show a decrease in price by an average of all our parts—across the board—rose 62 percent.

So far this year, spare part prices to the government for all of our products have increased by an average of only 1.8 percent. Importantly, though, parts for the high-volume F-100 engine show a decrease in price by an average of almost one percent.

That's a record of cost management that's tough to match.

Sensationalized stories about soaring prices reflect misunderstandings of the parts procurement process. Many of the alleged, or apparent, increases weren't increases at all.

They were the differences between the final price and rough estimates that were used only to get the procurement process started so the military could get its parts on time and keep its planes flying.

But there are many justifiable reasons for price increases. In many cases, a part in question had been out of production for 10 or 20 years or more.

As I said earlier, there are 20,000 Pratt & Whitney military engines in the field today and a lot of them are out of production. B-52s, for example, in many cases use eight J57 engines, which we began delivering in 1951. We haven't produced the J57 since 1965. But we still support those engines with spare parts.

But when the government ordered an out-of-production part, it meant Pratt & Whitney or the original supplier—if still in business—had to start from scratch in obtaining tooling and setting up machines to make it.

Price estimates had to be used. But both the company and the military customer understood that the starting-point estimate was not necessarily the final price or actual price.

Here's another example. Much publicity has been given to the \$17.59 unit price for an engine bolt. Eighty-three of these bolts were delivered in 1982. It had last been purchased by the government nearly 20 years ago—in a quantity of 1,200 for 67 cents each.

If the government had ordered 1,200 of these bolts for delivery in 1982—instead of just 83 bolts—the price would have been \$2.30 each, not \$17.59.

A good analogy is the price you'd have to pay for this morning's Washington Post if yours was the one and only copy printed. That newspaper would have cost many thousands of dollars, not just a quarter. It's the 747,000 copies a day that help to keep the price down.

Parts procurement is a very complex subject.

There are many things to take into account. When comparisons were made, did auditors look at the relationship of quantity to unit price? Were the data used to make the comparison valid? In the case of the widely publicized draft report by the Inspector General, the answer is, “no.” The Inspector General says that in some cases the data were faulty. Were materials available? Did we have to make new tooling to produce a few parts? Was the original manufacturer, who had the know-how, still in business? Did the customer require expedite effort which cost more? I could go on and on.

My point is, that just comparing two sets of figures is meaningless. You have to get behind the figures. One of the reasons we're all here is that, in many cases, nobody bothered to get behind the figures.

As a result, a system that in most cases has served the military well is under attack. People who are honest, hardworking and dedicated, both in government and in industry—have had their personal integrity maligned.

Now there is a rallying cry for everyone who thinks defense spending could be cut substantially if spare parts were procured differently. The cry is “breakout.”

The argument goes that the prime contractor is merely a conduit for the parts, driving up the price by adding handling charges.

The idea of breakout is good and we support it. If you can buy a part from one of Pratt & Whitney's suppliers and save money—and still get the same value—it makes good sense to do it, and I encourage it. The concept is sound. But it's not simple.

I believe breakout should be applied selectively, but not across the board. As you will hear later, we are working effectively with our military customers to achieve breakout where practical, and we've had some excellent results.

Pratt & Whitney is much more than a "middleman" in the government's procurement of parts built by our suppliers and ordered through us. We deliver an array of services of value to the government, and the costs of these services are reflected in the prices negotiated with the government.

Last year, the government bought 7,000 different parts from us in more than 20,000 separate transactions.

I'd like to use our F100 engine as an example. It has thousands of different parts, produced by 270 different suppliers. In the course of our day-to-day business, our purchasing department deals with all of these suppliers. Our engineers work with them. Our quality control people and expeditors are in their plants. In most cases there is more than one source, so we can competitively procure the parts.

We inspect parts to be sure they meet the military's specifications, to assure the same quality the Air Force or Navy had in the engine when they bought it.

We help manage the flow of parts into subassemblies and assemblies. We make sure the right parts get shipped so they ultimately get to the right depots and overhaul shops—on time. We help the services forecast their requirements. Our technicians are on site in their depots, at their bases, aboard their ships.

One of the most important services we provide is quality assurance on all parts, including those we purchase from our suppliers.

We have more than 3,000 people directly involved in quality assurance. More than 200 of them—in addition to 90 metallurgists—are situated at supplier plants to be sure that there are proper processing and control of critical raw materials and finished parts. Our suppliers cannot duplicate the full extent of our quality control capabilities, and neither can the government in the near term, because it's a system that is based on years of experience and data.

The government needs our technical assistance, both in identifying and resolving field problems before they become catastrophic. We develop new inspection techniques and provide training to assure that the latest maintenance and inspection procedures are in place.

We participate in field incident investigations to feedback quickly any design changes necessary. We're there when you need us.

Another important value that we add is maintaining and supporting a highly competitive base of subcontractors.

The government and Pratt & Whitney report separately on competitive procurement and on awards to small and minority business. Thus, when the government states that 90 percent of all procurements are sole-source we have to disagree. We see 60-65 percent being placed sole-source with Pratt & Whitney, and in the case of the F100, we estimate that only 45 percent of the spare parts dollars are being placed with Pratt & Whitney.

Furthermore the government doesn't identify the competitive subcontracting by Pratt & Whitney and other prime contractors. Nowhere has the combined effort been reported.

While a prime contractor may not be competing directly against a supplier on each and every part, as a prime we insist on competition among several suppliers to us as we buy these parts. We get competitive bids from our suppliers and the taxpayers benefit from this competition.

About half of the money that comes to Pratt & Whitney is spent competitively with our suppliers, and about 30 percent of that goes to small and minority businesses.

These are facts that don't shown up in the government reports on competition. But when our data is combined with similar government data, it's clear that a considerable amount of business is competitive already . . . not just the 10 percent or so that has been discussed lately, but more like 50 percent . . . and small and minority business get a substantial amount.

Another service that we provide that is a significant value added is traceability of parts. What would happen to fleet readiness, say, if there were a failure

of a major component in an engine—maybe a disc, over at Bitberg where the Air Force flies F-15's.

Because Pratt & Whitney supplies that disc today—either by making it ourselves, or buying from one of our suppliers—we know everything there is to know about it. We can trace it back to the raw material, and through every step of its manufacture—some of which takes place at our suppliers. We can quickly determine the cause of the failure, isolate the concerned parts in specific engines and aircraft and recommend what field actions must be taken, if any. In industry jargon, we call that part traceability and configuration control.

But if the government bought that part from a supplier or a couple of suppliers—under breakout—it would have lost traceability, and configuration control. So what happens to the fleet? It could stay on the ground while the Air Force tries to find out where the disc came from and what happened to it. That, gentlemen, could be a very costly situation and seriously impact Air Force mission readiness.

A value that often is overlooked, but is extremely important to the military is our spare parts warranties. We provide warranties for all parts we sell—if the customer has a problem with our part, we take care of it. We have been innovative in recent years, and provided extended warranties on high dollar value critical parts, and we're going to be even more aggressive in this area.

The price of one of our parts covers not only the cost of the part itself, but of all these services. And if someone in the government has a problem, he has only to pick up the phone and dial one number. Ours.

This is the value I'm talking about. The government needs these services. It needs us to develop qualified suppliers, to have our people on site—both at our suppliers and wherever the military services need us. The government needs our technical assistance in solving in-service problems and in maintaining fleet readiness. It needs to have part traceability and configuration control for critical parts to isolate problems without grounding the fleet. It also needs the warranties we provide to back up what we do.

If the prime contractors don't provide these services, the government would have to make other arrangements to get them. And they probably would cost more any other way. As it is now, the government has neither the manpower, skills and knowledge, nor the budget required to get the job done another way.

As we replot our course on spare parts, we jointly have to be sure the costs really go down, considering what costs will be required that had been covered by the prime contractors.

Government and industry alike—particularly small business—must recognize and acknowledge the value added by the large systems contractor in making certain that the government gets the best and most cost-effective technology available.

Now, let me be more specific on the subject of breakout. We have been helping to improve the government's ability to break out parts.

In 1982, for example, we identified 1,400 F100 parts that could be broken out and procured competitively and provided an additional 5,500 parts for the Air Force's TF30, J57, J75 and TF33 engines for breakout.

For the Navy's J52s and TF30s, we have identified 1,500 parts that can be broken out and right now, we're reviewing another 2,000 parts for the Navy.

In total, we've identified more than 7,500 parts for breakout in the past two years.

We're not going to stop there. As we continue to break out, we will encounter the more technically critical parts. So we can assure that the proper breakout decisions are made, we recommend that we adhere strictly to Defense Acquisition Regulation Supplement 6, which is a recent initiative by the Secretary of Defense.

This regulation says, in essence, "Breakout where prudent. Don't compromise flight safety or system readiness." If we all follow this regulation closely, it gives us the discipline necessary to minimize any adverse effects of breakout on our vital weapons system.

In addition Pratt & Whitney already has committed hundreds of millions of dollars in advance procurement of engines and spare parts for known government requirements, when the system under which the services are funded doesn't allow them the money to protect their lead times . . . that 12- to 24-month period between the time they have to order and when they get the hardware needed to keep their aircraft flying.

The government can't give us the money for this . . . we commit our own . . . and when we do, we're not under contract, and that means considerable financial risk. In essence, we protect government program schedules with our own money until government money becomes available.

A couple of years ago, there was another hearing before the Congress. It focused on concern over system readiness, the adequacy of America's defense industrial base and its ability to surge in times of national emergency. We all acknowledged then that the system was wanting.

I'm reminded of that now, because there is nothing in the new initiatives by the Department of Defense that expands or enhances our nation's industrial base in aerospace. In fact, the initiatives probably will reduce the already limited surge capability that exists today. That is the price the nation may have to pay.

The system does need overhauling. We have to take a disciplined approach to implementing the secretary's initiatives. We've got to be cautious and exercise control as we make improvements. Improvements can be made.

We in industry have procedures that are basically sound. But we're human. We make errors in estimating and pricing, in forecasting, and in distributing our parts. Sometimes we miss our schedules. And lots of times, we uncover our own mistakes and try to set them right. We're trying to do a better job and will keep trying.

On the government side, it seems to me the keys to success in bringing about the needed changes are budget and people. The Air Force itself, in a recent study called "Corona Require," takes a hard look at its own issues of years of underfunding, antiquated computer systems, and lack of well-trained, skilled people.

The secretary's new initiatives recognize these shortcomings. But we all must be careful not to implement changes before the resources are in place and ready to function effectively.

There aren't any easy answers. But, I think there are some things that can be done that will help, and we've recommended them to the Air Force.

First, let's establish and procure economic ordering quantities, so the government gets the lower prices larger production runs afford.

Second, let's procure selected spares on a multi-year basis. This also means lower prices through larger orders, more efficient use of industrial resources, and planning benefits to both the suppliers and the government.

Third, let's procure the initial provisioning of spares as the services buy their engines—again on a multi-year basis. Lower prices again would result, because of larger production lots.

Fourth, let's have the government "buy out" spares for older engine models such as the J57, J58 and J75—engines still needing support in the field, but long out of production. Then, there won't be the need to buy very small quantities, year after year, and less chance of repeating the problem of procuring only 83 bolts.

Finally, we as prime contractors have a responsibility to assist government procurement agencies to break out more spare parts. This is particularly true of those parts where risks are limited, where they are not critical to the safe functioning of the engine. We are cooperating with the government's efforts on reviewing policies on re-procurement data, data rights, breakout and licensing. And we're committed to this course.

In any event, there must be a disciplined and reasonable joint approach to making the system better. We can't jeopardize our military readiness on the one hand. Neither can we put industry in the position of unacceptable financial risk on the other hand, because if we do, we could truncate our vital defense industrial base.

Together, the government and we in the defense industry have faced many difficult and complex problems. I have no doubt that the current national perception of a parts pricing problem is one of the most serious we have ever had to confront.

As a taxpayer, I'm very concerned about cost increases incurred in almost every sphere, not just in defense spending, by the U.S. government.

We at Pratt & Whitney are proud to be part of the national security system, and we're proud of our record. I pledge to you our best efforts to help ensure improvements in spare parts acquisition.

Chairman TOWER. Thank you, Mr. Wegner.

I think we will proceed to questioning of Mr. Wegner before we hear from Mr. White.

Mr. Wegner, this committee became cognizant some 3 or 4 years ago of the fact that we had shortchanged our military organization in the spare parts job.

At our own initiative we added money to the budget request of President Carter to buy spare parts, to improve the maintainability of our system, and to increase readiness, recognizing that that is an essential element of readiness.

We have dedicated a great deal of money to this purpose. We are the stewards of taxpayers' dollars. I am not amused when I participate in a mission to increase defense spending to find that there have been some gross overcharges on parts that boggle the mind.

I can tell you that this committee is going to exercise its oversight responsibility. We are going to get to the bottom of this sordid business of overcharges on parts and try to give the taxpayer his money's worth.

I have in front of me an article that appeared in the Miami Herald on Sunday, October 23, which makes pretty serious assertions about what Pratt & Whitney has done.

Let me say Pratt & Whitney makes a good product. We are pleased to do business with Pratt & Whitney, but we are not going to be shortchanged. We had fairly extensive testimony yesterday from the Inspector General in which he submitted some examples of cost growth in unit pricing from Pratt & Whitney aircraft.

Quite a number of them indicate that the percentage increase between order and delivery prices was in some cases astounding. Let me just cite three examples of this.

CASE ASSEMBLIES

The order price per unit was \$6,445.65. P&W's price estimate was \$7,858. The delivery price was \$45,236.11, an increase of 602 percent.

Here is another one, tube assembly. Order price per unit \$117.26. P&W's price estimate, \$277. The delivery price, \$1,308.08, an increase of 1,016 percent.

Now, here is the granddaddy of all of them, a tube. Order price, \$12. P&W's price estimate \$459.33. Delivery price, \$639.29, an increase of \$5,227 percent.

According to the story in the Miami Herald and actually using as a source the General Accounting Office, P&W billed the Air Force \$1,544,120 for parts that the company obtained from subcontractors for \$261,684.

Now, these are parts that came from the subcontractor. I can't conceive of how much value was added by the price contractor that would result in such an enormous increase in price.

We are familiar with what is known as passthrough. There are recent allegations that Pratt & Whitney participated in the following passthroughs in which subcontractor prices were marked up in excess of 1,000 percent:

Part TF-33 engine seal.—Subcontractor price, \$483.28. Price charged the United States by P&W \$2,020.50, a 418 percent markup.

Turbine blade.—\$35.38. Price charged by P&W, \$390.47, a markup of 1,103 percent.

There are others.

Now, let me ask you, first, what percentage of the spare parts sold by Pratt & Whitney to the Government are manufactured by subcontractors?

Second, what value could possibly have been added by P&W to each of these parts to justify such a substantial price increase?

Mr. WEGNER. Mr. Chairman, I, too, share your concern. What I would like to state, though, is to go back to my testimony where I showed that in aggregate our parts price increases over the past 5 years have been substantially below the Department of Commerce's deflators that are used to measure the inflation rate in this country.

That isn't to say that there aren't some mistakes made by some prime contractors in all businesses on some parts. We basically have focused on the 2 or 3 percent of the parts that we supply as the examples that are continuously used to point out how this procurement system works.

We don't ever state that in 1982 over 65 percent of all the parts supplied by Pratt & Whitney to the U.S. Government either had price decreases or had a price increase of less than 10 percent.

We don't state that in 1983, of all the parts supplied thus far this year over 80 percent of those parts has had either a price decrease or for those that had a price increase, an increase of less than 6 percent.

We talk about comparing prices and we don't really compare prices. What we do is compare an estimate which we submitted to the military, with the military's knowledge, as a way to get an out-of-production part on order and then we would go out and try to find the tooling, the drawings, the subcontractor, and the material to make those parts.

So, when you compare a price for something that was manufactured in 1965 to a price that is applicable in 1982 and you don't take into account the impact of volume, and the bolt is a good example where there is a very, very sharp price break as volume goes up, you are mathematically correct, but the analysis that is being made I think is unfair and statistically spurious.

You ask what percentage of parts are manufactured by subcontractors and what by Pratt & Whitney itself. I don't have that statistic with me. We will get that and supply it to you. I do know that on a cost basis about 70 percent of the dollars that we spend go to subcontractors and 30 percent is spent within Pratt & Whitney itself.

[Additional information follows:]

Senator TOWER. What percentage of the parts are manufactured by subcontractors and what by Pratt & Whitney itself?

Mr. WEGNER. About 15 percent of the part numbers, representing about 60 percent of the dollars involved, have Pratt & Whitney manufacturing content. Eighty-five percent of the parts, representing about 40 percent of the dollars involved, are parts manufactured by subcontractors.

Chairman TOWER. Mr. Wegner, I don't think that completely answered my question about passthrough.

Why is it that a turbine blade had a subcontractor price of \$35.38, but then it comes through Pratt & Whitney it costs the Defense Department \$390.47? That is quite a substantial markup.

Mr. WEGNER. I can't answer that one specifically, Mr. Chairman, but we will get you the answer.

[The information follows:]

Mr. WEGNER. In 1979, despite our advice to the contrary, the government elected unilaterally to adopt a firm-fixed price contract basis—in lieu of the redeterminable basic ordering agreement (BOA)—for certain spare parts, one of which was the turbine blade in question. ~~The unit price was to be fixed~~ in advance on an assumed volume requirement projected by the government for each part.

In the price negotiations, the government specified its requirement projection to be 184 turbine blades, but required contractual latitude to vary its actual buy to a minimum purchase of 25 percent of the stated requirement.

Based on these parameter, we went to our subcontractor and negotiated a price of \$234 each for an assumed 46-blade (25 percent) minimum order. After disclosing that price quote to the government, Pratt & Whitney and the government negotiated the firm-fixed price contract in which the turbine blade unit price was set at \$390.47.

Nine months later, in July 1980, the government ordered under that contract. The actual order quantity was not for 46 blades, or even the 184 units that had been forecasted, but was for 1,440 units.

We then re-quoted our source and obtained a unit price bid of \$35.38 each, based on the actual quantity ordered. The firm-fixed price contract had no redetermination provision so the government paid the unit price of \$390.47 for which it had negotiated.

Those are the elemental cost/price relationships in the transaction but they must be regarded in the light of the contract structure. By its selection of the firm-fixed price contracting method, the government imposed the highest order of risk of all the various contracting techniques authorized for defense procurement. Experience indicates that although the suppliers' risk is maximized in that contract mode, the results are mixed—some you win; some you lose. We can cite, as can any fixed price contractor, numerous sales in which our costs of performance have greatly exceeded the price to which we had agreed.

The essence of the firm-fixed price contract is the bargain struck in advance by the parties. That form of contract does not contemplate or tolerate retrospective adjustment. In this case, the contract terms expressly preclude any price adjustment for changed volume—an emphasis insisted upon by the government's negotiator.

Had the government elected to purchase the same item under an alternative contract form (e.g., the redeterminable BOA) with reduced risk to both parties, we now know that the government's cost would have been approximately \$54 per unit. The economies achieved were the result of the volume actually ordered and that quantity was, as noted, far in excess of the requirements specified for the pricing action. In hindsight, the BOA would appear to have been the preferable course, but were it not for the volume swing, the more beneficial bargain for the government could well have been realized in the firm-fixed price mode. As I said in my direct testimony, the firm-fixed price contract is not a panacea for government procurement efficiencies.

The economies of scale are very real in our business. The uncertainties of the government's volume requirements, the effects of budget constraints on volume variations in orders, the uncertainties of the economy, all combine to amplify the risk-reward relationship beyond those limits which would be inherent in a firm-fixed price contract in a commercial transaction.

As a consequence, it is not remarkable that a selected line item order under such a contract will appear, in isolation, to evidence a significantly higher than normal profit in one case—or a significant loss in another.

Mr. WEGNER. The standard markup for Pratt & Whitney on our parts that we buy for the cost that we incur is about 30 percent. On top of that we have a profit markup. So I can't explain to you that specific part as to why there would be that apparent large increase in the markup.

By the way, sir, all of these markup factors are fully negotiated with our U.S. Government customer. They are all audited as to reasonableness by our U.S. Government customer and in no way do the defense contractors unilaterally set prices on anything. It is a bilateral negotiation with the U.S. Government.

Chairman TOWER. Mr. Wegner, I would like to submit to you for response in writing for the record some examples of increases in the prime contractor's price to us over the subcontractor's price to you, if you would supply answers for the record.

Mr. WEGNER. Yes, sir, we will.

[The information follows:]

Senator TOWER. Could you please explain these examples of cost growth?

Item	Quantity	Order price	P&W estimate	Delivery price 1982	Percent increase over order price
Tube assembly.....	34	\$117.26	\$277.00	\$1,308.08	1,016
Case assembly.....	3	6,445.65	7,968.00	45,236.11	602
Tube breather.....	8	12.00	459.33	639.29	5,277

Mr. WEGNER. Terms and figures used in the table above are not correct and result in conclusions that are grossly inaccurate.

For example, figures appearing under the heading, "Order Price" are not actual prices quoted to the government when the spare parts order was placed, but are simply price estimates by the government, some of which represent prices paid by the government more than 10 years ago.

Similarly, percentages of cost growth as described in the table are not accurate. To establish correct percentages, actual prices paid by the government must be compared to actual prices paid by the government at a later date. The table compares price estimates to actual prices paid by the government.

These price estimates were inaccurate because they did not take into account such critical pricing factors as production status, order history, and quantity.

For example, all three spare parts listed were for engine models long out of production.

One part, the case assembly, had not been shipped to the government for 15 years. Another, the tube assembly, had not been shipped to the government for 11 years.

Price estimates for the tube assembly were based on a previous order for a quantity of nearly 1,000 pieces for delivery over two years, yet that estimate was applied to an order 11 years later for only 30 pieces.

It is significant to note that the government recently has increased either its frequency of order and/or the quantity ordered for all three parts. In each instance, this has resulted in price reductions to the government for these parts, reductions ranging as high as 46 and 55 percent between 1982 and 1983.

Case histories of the three parts follow:

PART NO. 506666, TUBE ASSEMBLY

This part is for the P7 model of the TF33 engine, which has been out of production for 15 years. This part was last shipped to the government in 1971.

Between 1970 and 1971, the company shipped 996 of these tube assemblies to the government and a company purchase order then yielded a unit cost to the company of \$77.70.

This cost was the basis for the final delivery price of \$117.26 in 1971, which included Pratt & Whitney's mark-up, negotiated and approved by the government. This was also the figure used by the government as its order price the next time this part was ordered from Pratt & Whitney despite the fact that 11 years had elapsed and the quantity of 34 was more than 90 percent less than the quantity ordered earlier. Pratt & Whitney's estimate was also based on the 1971 delivery price, but with an allowance for inflation.

Neither the government's order price nor the company's price estimate took into account the substantial effect that quantity, order history or engine production status would have on the price of this part over an 11-year period.

Pratt & Whitney's 1982 delivery price to the government was based on a 1981 unit cost, as purchased, of \$821.93. To this amount, Pratt & Whitney added its mark-up as negotiated with and approved by the government.

The effect that quantity and order history had on this part is underscored by the fact that this part should now decrease in price to the government as the result of additional orders.

A company purchase order earlier this year for 80 more tube assemblies for the government yielded a unit cost to Pratt & Whitney of \$710.00. The price to the government for new deliveries will be based upon this lower cost.

PART NO. 500266, CASE ASSEMBLY

This part is for the P9 model of the TF33 engine, which has been out of production for 19 years.

The government's order history for this part has been sporadic. In the 16 years prior to the 1982 shipment, the government only ordered this case assembly five times, and in quantities ranging from two to seven.

The government's price estimate of \$6,445.65 was based upon an order for seven pieces that were delivered in 1979. But the government applied that price as their estimate to an order for only one piece to be delivered in 1982. Actual delivery price of \$45,236.11 was based upon a supplier cost to Pratt & Whitney of \$27,623, and the company's mark-up as negotiated and approved by the government.

This case assembly is a particularly intricate and difficult part to build. It requires specialized coating, turning, drilling and a vendor capable of manufacturing welded assemblies. The difficulty in finding qualified vendors for low-quantity, placed intermittently, for spare parts from out-of-production product lines, has a significant effect on the price of such parts.

The converse of this effect was illustrated when the government placed additional orders, in November of 1981 for seven pieces, and in January of 1982 for three pieces.

Pratt & Whitney was able to combine these orders into a single purchase for ten pieces, and to increase the number of qualified sources. As a result, the company reduced its unit supplier cost by more than \$14,000.

The 1983 delivery price will be based upon the new supplier cost to Pratt & Whitney of \$13,446, plus the mark-up negotiated with and approved by the government. This 1983 delivery price of \$20,695 per unit is a 46 percent price decrease compared to the 1982 delivery price.

PART NO. 536375, TUBE BREATHER

This part fits four models of the TF33 engine; the P3, which has been out of production since 1962, the P5, out of production since 1963, the P9, out of production since 1964, and the P11A, out of production since 1966.

The price history of this part makes it clear that \$12.00 was not a reasonable starting point from which to begin the procurement process.

This part had not been ordered by the government since 1966. A purchase order ten years later, in 1976, placed by the company for a commercial customer yielded a unit supplier cost to the company of \$260 for a quantity of 43. Pratt & Whitney's price estimate to the government of \$459.33 was based on the 1976 purchase order with allowances for inflation, for eight pieces.

Actual delivery price to the government was based upon the 1981 standard cost for this part and the company's mark-up negotiated and approved by the government.

The price to the government for this part has decreased by 55 percent as a result of increased government orders. These orders have enabled the company to lower its supplier cost and reduce the unit delivery price to the government from \$639.29 to \$353.52 for 36 pieces delivered in 1983.

MARKUP

Mark-up is not profit.

It is a method used to establish final delivery prices to the government based on cost-allocation formulas that are negotiated and approved by the government in advance of the year in which spare parts are shipped.

Mark-up includes profit, and is also a reimbursement to the company of various expenses incurred in providing customer support services to the government to ensure that all spare parts meet strict government standards for quality, performance and reliability.

For example, these customer services include quality control, field product support, engineering, research and development, general administrative functions, product purchasing, shipping, packing, and expediting.

Chairman TOWER. My time is up.

Senator Levin?

Senator LEVIN. Thank you, Mr. Chairman.

I welcome our witnesses this morning.

Mr. Chairman, I must tell you that I fully join in your statement. Some of the prices that we are paying for parts are nothing less than unconscionable gouging. Waste in the defense budget is no different from waste in the other budgets.

The only difference as far as I am concerned is that it is the obligation of this committee to root it out, whereas other committees have the obligation to root out waste in other portions of the budget.

I think this budget has been sacrosanct over the years because people are afraid to go after waste because they might be labeled antidefense.

So far as I am concerned, the people who might try to get at the root because of some of the excesses we pay for various purchases that we make in the defense budget are prodefense and trying to save defense dollars for where they are critically needed.

As a matter of fact, I remember Mr. Stockman saying there is so much waste in the defense budget that the first one he saw he didn't have time to get to it. I don't think he has spent much time on that task since then.

Part of the problem is that the Defense Department resists change in the way they do things.

I know that a number of us on this committee have been involved in trying to reform the way in which we procure items for this Government in the area of defense and trying to install competition, trying to put some kind of brake on the amount of money we pay for spares.

Those two amendments come to mind. I have been personally involved in them, offering them now with some success. I tell you the resistance we have found in the Department of Defense to change has been severe all the way along.

Amendments have not been easily accepted, and always over the objection of the Defense Department, but again finally there has been some success in these efforts.

I am not sure I blame the companies for getting as much as they can. I am not so sure I expect anything more from a private enterprise endeavoring to maximize its profits.

I think perhaps if we expect these companies to do anything other than that, we are expecting more than we should.

It is part of the system that the companies are going to try to maximize their profit. It is up to us to try to negotiate good deals on the other side of the bargaining table so that we don't pay more than we should.

It is up to us to try to make sure there is adequate competition. That is the key to all of this.

There is not adequate competition obviously for our spare parts. We saw a chart from the Air Force showing something like 70 to 80 percent of our spare parts dollars are not competed for.

As long as that is true, we are going to be sitting with no bargaining leverage. We will be sitting on one side of the table and our contractors—I am not lambasting contractors at all in this regard because I think they are doing what by their nature they are going to do—they will sit on the other side of the bargaining table and say, "This is the best price we are going to give you."

If we are put in a position where we have no one else to turn to, and that is the position we are in in 80 percent of spare parts purchases, we don't have any leverage by which to get these prices down.

I think it is to a large extent an internal problem with the Defense Department as to how we have done business and our willingness to allow the spare parts business to be performed without adequate competition.

I do have a number of questions for our witnesses on the way in which the prices are determined for spare parts.

Let us go back to that turbine blade the chairman talked about. You don't have the figures, so I won't ask you how you got from \$35 you paid for it to \$390 we ended paying you for the same turbine blade, but I would like to take an example.

In picking figures out of the air, can you give us a theoretical way in which that \$35 could get up to \$390?

Without looking at the actual facts, can you tell us how you might figure this? Your overhead could be something and your management fee something else and I guess what we call the general and administrative figure would add so and so and then you add profit to that.

Is there any way theoretically you can get from \$35 to \$390? Can you walk us through it on the board?

Mr. WEGNER. There is no way theoretically I can get there. I can go through for you using as an example something you bought for \$1 and the kinds of markups that we generally put on.

Senator LEVIN. That would be useful. Take something you pay \$100 for. You are paying \$100. We are sitting down with you and you are buying a turbine blade from a subcontractor.

How much are you going to charge?

Mr. WEGNER. We would compete to buy the blade, assuming we had two different suppliers. We pay \$100 for it. We would then charge around \$11.

That would include all of our purchasing organization, all of the quality assurance that goes into inspecting the blade at the supplier's plant, inspecting it when it came into our facility, going through our material control laboratories to make sure it has all the proper fatigue characteristics, and so on.

In the case of the turbine blades we would probably weigh them, balance them, and put them together in pairs and package them in whatever manner the U.S. military had told us to.

On top of that we would have \$7 for engineering and development and that would include recovery of IR&D, what we call engineering assistance to production, and the warranties, I believe, that we have are in that category there.

We would also have a charge of \$4 for marketing and product support and that includes all of our people who work directly with the customer at his base on the ship, and so on and so forth, at the logistics command supporting them, ordering and processing the order for spare parts, technical people in the field solving problems, so on and so forth.

We charge on top of that \$8 for general and administrative expense. That includes all of our finance organization, our data processing, our personnel and industrial relations functions and supervision and management.

That would then give you a cost of \$130.

We would then try to get 13 percent profit on that which would be like another \$17. So, you should end up with something that cost \$147.

Senator LEVIN. \$147 starting with your cost of \$100?

Mr. WEGNER. Purchase cost of \$100, right.

Senator LEVIN. Are those figures on percentages? When you said \$4, 4 percent, is the percentage for marketing and product support, is there a percentage for general and administrative expense?

Is that the way it works, on a percentage basis?

Mr. WEGNER. I believe it is on a percentage basis. It is a negotiated preagreed to factor that we go through with the Air Force customer that is then applied across-the-board to parts.

Senator LEVIN. You would sit down with a customer and say, look, 11 percent for inspecting the blade, that gets us up to \$111.

We need 7 percent for engineering and development. That is another 7 percent. That percentage is paid on your experience with your costs over the entire operation of your company; is that right?

Mr. WEGNER. For purposes of this example, we could certainly say it is percentage.

Senator LEVIN. Is it not fair to say then that the more that you pay for a part, the greater the return you are going to get, the greater profit you are going to get, since your profit is a percentage of all those costs you have given us?

If you had to pay, I say had to pay—I will try to be neutral—instead of \$100 for that blade, you had to pay \$200 for that blade, your profit comes out to be greater even though your work is exactly the same?

Is that a fair statement?

Mr. WEGNER. That could go either way. It depends on the type of contract that you have.

Senator LEVIN. Assuming the same contract that you just outlined for us?

Mr. WEGNER. This sort of contracting method is applied to all sorts of different types of contracting.

Senator LEVIN. I understand.

Using the method you just outlined for us, if you had to pay \$200 for that blade instead of \$100 for that blade, you end up with a greater profit, is that not true?

Mr. WEGNER. No. Say you had a firm fixed-price contract to supply the blade for \$148. If your costs go up, are you basically going to eat that cost? If it goes down, your profit rate goes up.

Senator LEVIN. I am not saying that if later you find out you have to pay \$200.

I mean when you first sit down with that purchasing officer and you say, "Wait a minute, that blade costs \$200, not \$100."

If we use that as a base, won't that end up giving you greater profit?

Mr. WEGNER. Absolutely. Profit is based on a percentage of cost. The higher the cost base, the percentage stays the same, but the absolute dollars go up.

Senator LEVIN. So that the more you pay for the blade in the first instance, the greater your profit?

Mr. WEGNER. Using your example, that would be correct.

Senator LEVIN. Your incentive then in terms of maximizing your profit is not to keep that original cost down; it is quite the opposite?

Mr. WEGNER. You are talking in theory?

Senator LEVIN. I am talking in practice.

Mr. WEGNER. About 50 percent of our business is commercial.

Senator LEVIN. I mean with the Government.

Mr. WEGNER. I know. What I am telling you is that because of competitive pressures we have on the commercial side of our business we operate it to try to get the lowest possible cost that we possibly can, not to play a game of increasing cost to maximize profit on Government business.

Senator LEVIN. My time has expired.

Thank you.

Chairman TOWER. Senator Bingaman?

Senator BINGAMAN. Thank you, Mr. Chairman.

Let me just follow up on what Senator Levin was asking about.

In this report we were given, that was discussed with us yesterday, by the Inspector General of the Department of Defense, on page 11 he has a quote from the team that worked on this, a team formed by the commander of APRO, West Palm Beach, Fla., to investigate some of these problems with your company.

He says in here in this quote, "Pratt & Whitney literally has no incentive to control indirect cost reflected in the price of Pratt & Whitney spares."

That is obviously a conclusion based on what they feel they have found, but I would like to ask you what are the incentives? I think what we are trying to do is find some fixes for the system.

If we have a system that gives you no incentive when dealing with the Government to keep costs down, then we obviously are going to have a long series of these problems and it is an endemic problem with us.

What is the incentive you have in dealing with the Government to keep these costs down?

Mr. WEGNER. I think the primary incentive that we have, Senator, is what I stated to Senator Levin, that we basically have a mixed business between commercial and military and to stay competitive in that marketplace, we focus on cost.

We can't afford to have lots of excess indirect cost or else we are not going to be competitive in the other part of our business.

I think what you are getting at is the theoretical question, that if everything you do in a procurement system is based on cost, including the reward for the contractor, and that the higher his costs are, the higher his reward, and that is the way your regulations spell it out, you are providing a disincentive for contractors to reduce cost.

You are absolutely correct.

Senator BINGAMAN. So you are saying the way the system is set up for defense procurement we have an incentive for contractors to increase cost so that they can increase profit.

Is that what you said?

Mr. WEGNER. Your system basically allows a profit rate as a percentage based on cost and, yes, the higher your costs are, the percentage stays the same, but the absolute dollars of profit go up.

Senator BINGAMAN. You are saying that the reason that this doesn't apply in practice is because you are required to be competitive because half of your business is commercial?

Mr. WEGNER. Yes.

Senator BINGAMAN. Wouldn't it be just as logical to say that since you have to be competitive in one-half of your business, you ought to try to be as profitable as you can in the noncommercial side of your business and, therefore, there is an additional incentive in the Government side of your business to get the cost up?

Mr. WEGNER. That doesn't apply to us because we have basically commingled facilities. We have one standard of what we call excellence for quality, for cost, for delivery, that are applied to all of our customers.

Whatever we do, it is basically shared on the business base. So that would not apply to us.

Senator BINGAMAN. Is the solution to this to have all fixed price contracts in Government procurement? Or what is the solution to this disincentive that you have identified?

Mr. WEGNER. I think once again, and I get very concerned here because you are talking about a very complex system and we are all trying to oversimplify it, firm fixed-price contracts I don't think are the answer.

The reason is that the military procurement people don't always understand or know what their requirements are for the future. They don't always have the funding available to buy, like I was recommending, the economic lot sizes that would really make an impact on your costs.

On a firm fixed-price contracting basis you are basically going to sit down and negotiate with the contractor, who is going to try to protect himself from whatever inflationary forces he feels are going to happen in the future in our economy.

You are then going to be negotiating in a kind of never, never land with the Government saying one thing and the contractor saying another.

The prime contractor can make a lot of money if he is right or he can lose money if he is wrong. I don't think firm fixed-price contracting is any better than any other contracting method you have right now. It is not a panacea for solving the problem you have in your procurement system.

Senator BINGAMAN. You are saying there is no panacea and you have given us some general directions that you think we should go in.

You think that is the best we can do?

Mr. WEGNER. I think those are the things that will have the biggest impact on prices in the future for procurement of parts. I think it will also have the biggest impact on preserving a good industrial base in the military supply business.

Senator BINGAMAN. You have indicated, I think, that there are 7,500 parts that you folks have identified for breakout, as I understand it.

What has the Defense Department done with that list of parts? Are those being competitively supplied now?

Mr. WEGNER. I believe some of them are. I really couldn't answer in depth as to whether all of them are. I doubt very much that all of them are because I think it is a very, very difficult task for them to undertake with the limited number of people that they have.

Trying to find a supplier that will even quote on a lot of those parts is very tough. Trying to find the data package for a lot of these older

parts, the drawings, the quality data package, and so on, in their system is very difficult.

So, I doubt that the majority of those 7,500 parts are actually being bought on a break-out basis.

Senator BINGAMAN. You said in here, and I am not sure I can put my finger on it, something about how the Government doesn't have the requisite knowledge or in-house capability to really make some of these decisions, "Government has neither the manpower, skills and knowledge nor the budget required to get the job done in another way."

Can we require your company and similar companies to provide us with some of that as part of our contracts, some of that knowledge to make intelligent decisions on these things?

Mr. WEGNER. The knowledge obviously is retained with our people, people who have been looking at various types of parts for 25 or 30 years and by just looking at the surface of a part can tell whether you have a problem with the metallurgy in it.

There is also a tremendous data base that the prime contractors have developed, basically metallurgical data base where you can predict, given a certain flaw, what the life of that part will be, and so on.

Senator BINGAMAN. What I am getting at is if we have audits turning up 1,000 to 5,000 percent increases in price from 1 year to another, why should we have to hire someone to audit to find that?

Can't we require you to tell us what you sold it to us for the last time?

Mr. WEGNER. Absolutely.

Senator BINGAMAN. Do we require that now?

Mr. WEGNER. No.

Senator BINGAMAN. When you sell us a part, do we require you to tell us what you sold it to us for the last time?

Mr. WEGNER. To the best of my knowledge, you do not.

Senator BINGAMAN. Do you see a problem in including that as part of the defense contract we sign?

Mr. WEGNER. No problem at all.

You also ought to ask to get from the contractor some sort of estimate of what the economic order quantity of that part would be.

For example, that bolt that I showed you, I think it is crazy that you buy 83 of them and pay that high price for them.

Senator BINGAMAN. Thank you very much.

Thank you, Mr. Chairman.

Chairman TOWER. Senator Nunn?

Senator NUNN. Mr. Chairman, I had another meeting and couldn't get here. I regret I was late. I won't go over what I understand has been covered thoroughly. Let me ask a couple of questions of our witness.

Mr. Wegner, you mentioned in answer to a question a minute ago about an inability of the Department of Defense to buy consolidated economic quantities.

In other words, large quantities would drive down the per unit cost; is that correct?

Mr. WEGNER. Yes, sir.

Senator NUNN. What do you believe prohibits that? Is it primarily congressional funding, where we have 1-year budget cycles or is it the Department of Defense's own management or OMB?

What would prevent them from buying in larger quantities? Or is it just inherent in the planning system for spare parts?

If you were running the Government's spare parts business and you were sole dictator, what would you do about these quantities?

Mr. WEGNER. The first thing I think I would do would be to increase the length of time you fund for the procurement of parts.

Senator NUNN. You mean by that the Congress?

Mr. WEGNER. The Congress, yes, sir.

The second thing I would do would be to try to make the plans that are put forward by the Department of Defense come through. Their flying hours should be stable and the requirements for parts to support those flying hours should be stable.

I am talking peacetime obviously, not talking about the wartime sort of thing.

Then requiring the procuring agencies using those flying hours, to do a good planning job with a 2- or 3-year visibility and buy the parts on a multiyear basis to support their requirements for a 2- or 3-year period.

Senator NUNN. They don't do that now?

Mr. WEGNER. Senator, on average right now the same part is ordered from us four times a year. That means that nobody can do any planning, that your economic lot quantities are so small that you are always being eaten alive by set-up cost.

It is a very inefficient way to do business. It is done primarily, I believe, because the people that procure the parts have very limited budgets, they have very limited visibility as to what their budget increases or decreases will be and they are really trying to minimize the amount they can buy so that they can maximize their budget to cover whatever emergencies come up that they may not have foreseen.

Senator NUNN. A recent Air Force study found that only 21 percent of the spare parts dollars spent in fiscal year 1982, and I assume this is on the Air Force, was spent on competitive contracts.

In other words, 79 percent was spent on noncompetitive contracts.

I think you will agree if we could move more spare parts procurement to competition, it would be advantageous, would it not?

Mr. WEGNER. Yes, sir, I do agree with you.

As I stated in my testimony, I think sometimes we don't get all of the data that we should because in the case of Pratt & Whitney every dollar that we spend, 50 percent of it is spent competitively.

I am talking about our subcontractors, and there is a tier below that, and so on. There is a hell of a lot of competition that goes on at a level below the prime.

Of course, the prime does a very good job with small and minority businesses. As I said before, 30 percent of every dollar we spend is going to small and minority businesses.

Senator NUNN. Looking at it from the Government's point of view, if that Air Force study is correct and the Government is only having 21 percent of its spare parts dollars spent on competitive bids, what would be a reasonable goal?

You say you do 50 percent of yours with your subcontractors. Would 50 percent of spare parts dollars on competition be a reasonable goal for the Government in your view?

What should we be guided by? We know we can't do 99 percent. We know we can't do 90 percent, although everybody would like to.

What is reasonable to shoot for as far as Government competition in spare parts?

Mr. WEGNER. I think a 50- to 60-percent level of competitively procured parts would be a reasonable goal.

Senator NUNN. You think if the Government manages its business correctly, Congress continues to provide funding in the long-term sense and Government plans in a longer term sense than it does now, that we could get up to 50 percent or more?

Mr. WEGNER. Yes, sir, I do.

Senator NUNN. I find that encouraging.

You mentioned long-term funding.

Do you have any other suggestions as far as the Congress is concerned as to what we can do to improve the spare parts procurement?

Mr. WEGNER. We have a number of engines that we haven't produced for 20 or 30 years. This points up a good example of the planning problems that not only industry has, but the military itself.

Clearly, there was planning that the B-52 bomber would have been phased out and replaced by the B-1 bomber in the late seventies.

That program was postponed and as a consequence, all of the planning that we had all done kind of went out the window. As a consequence, we have all been scrambling, the Air Force, Pratt & Whitney, other suppliers of parts for the B-52's, to keep them in service a lot longer than any of us ever anticipated.

That inability for any of us to really plan is a very tough thing from the point of view of the manufacturer.

One other thing that I would ask that you take a very strong look at is stability. I use as an example the F-100 engine where over a 10-year period its price only increased 13.1 percent whereas the Consumer Price Index went up 117 percent.

That is a stable program. It has not been interrupted. We have been able to do a good job of planning. We have been able to buy in quantities. I think it is reflected very much in the price performance on that engine.

So, starting and stopping programs, pushing programs out and reducing the volume, I think, is an exceedingly expensive practice that we have all gotten into.

I think, if anything, when you start a program and you are going to do 500 of these things over its life and the life of production is 5 years, Congress ought to commit to doing it in 5 years.

If you extend it for 10 years, your costs are going to just soar.

Senator NUNN. Thank you.

Chairman TOWER. Mr. Wegner, thank you for your testimony. I believe we will have additional questions we would like to submit to you to respond to in writing.

We appreciate your being here today.

Our next witness is Donald H. White, president of Hughes Aircraft Co.

Mr. White?

STATEMENT OF DONALD H. WHITE, PRESIDENT, HUGHES AIRCRAFT CO.

Mr. WHITE. Mr. Chairman and members of the committee, good morning.

I am Donald H. White, president of Hughes Aircraft Co. I appreciate the opportunity to appear before this committee to present my views on the Department of Defense spare parts procurement.

As an important preface, let us remind ourselves that the purpose of spares procurement is to maintain the readiness of our military equipment. We must guard against adopting timid, or defensive, contracting practices that interrupt or delay the flow of support to our field forces. Spares horror stories cannot be allowed to dominate readiness.

Even fully recognizing this point, we must still address spares acquisition problems. I will direct my comments to three aspects of this subject:

First, my views on the cause of the spare parts problem.

Second, some ideas for solving that problem.

Finally, a description of the actions that Hughes Aircraft Co. has taken to improve our own spares management.

The basic problem in the acquisition of spare parts is not the cosmetic one of overpricing so emphasized in the media. The basic problem lies fundamentally in the inefficient and uneconomical way in which spare parts are acquired.

The cost of spares is not quite as simple as is often perceived. The value of a spare part is commonly thought to be the cost of material, labor and overhead—that is seen as its intrinsic cost.

Another less obvious, but essential cost, is that of spare parts management functions—whether performed by the contractor or by the Government.

These management functions include work such as planning for the acquisition of spares, screening of spares orders for potential sources, pricing, ordering, inspecting, shipping, documenting, et cetera.

In order to reduce the cost of spare parts, both the intrinsic costs and management function costs must be attacked. A basic intrinsic cost problem is the Government's inability:

First, to order in economic quantities.

Second, to consolidate requirements.

Third, to fund spares procurements without constraints and delays.

Industry, on the other hand, must tighten up its management of intrinsic cost elements—the efficiency of the production work performed. While the management function costs must also be severely controlled by contractors, they must be recognized, and dealt with, as real costs.

We must resist unrealistic requirements such as grassroots individual manual pricing of each spares item, for that would swamp all of us with massive detail that would be costly, time consuming and invite error.

A fundamental problem involves allocation of the costs of the spares management functions. In many instances the pricing methods em-

ployed by contractors have resulted in disproportionate loading of low dollar value spare parts—even though the pricing methods have fully met contractual and cost accounting standards.

In doing so, we shot ourselves and our customers in the foot with prices that appear unrealistic and cannot be understood by the public.

I recently took a statistical look at our current spares orders. Those results are attached to my written testimony. They are startling. They show that 85 percent of all of our spares orders account for only about 5 percent of the total value.

Obviously, they are individually very small. The pricing problems of which I've read seem to lie primarily in this low value segment.

I strongly urge that the Congress and DOD carefully assess the problem, and not permit themselves to be stampeded into correcting a 5-percent apparent problem to the detriment of the remaining 95 percent.

The solution of the spare parts problem requires a joint effort on the part of DOD and industry. Industry must play a more active role in spare parts acquisition planning and in the consolidation of spares requirements.

Perhaps we should return to the prior method of provisioning spare parts, the old provisioning conferences, with the understanding that the conference is not complete until the spare parts order is placed.

Since a major part of the problem stems from DOD's inability to buy in consolidated economic quantities, apparently attractive proposals such as competing all spares orders are not a panacea.

Competition on a selective basis is undoubtedly desirable. Competition in every spare parts acquisition is not, and would be too costly and inefficient for both DOD and industry.

Considering the current emphasis on increased compensation, it is interesting to note that some of our best and most effective commercial companies are discovering that fewer, more closely coupled, suppliers are the key to lower overall costs. They are working together on quality, better forecasting and tighter scheduling to their mutual cost benefit.

Even with greater consolidation of requirements some smaller buys may remain. Unlike commercial businesses, the DOD spare parts acquisition system does not employ a middleman distributor to act as a buffer between the services' buyers and the parts manufacturers for those necessary smaller buys.

Distributors do service contractors now, and do it effectively. Hughes would be pleased to sponsor an exchange between DOD representatives and some of these distributors to study the application of their business techniques to the DOD spares challenge.

Hughes has taken several recent actions to improve our spares management functions in areas that we can influence.

This summer the company formed a Corporate Spare Parts Management Council. It is chaired by the company's executive vice president, and its membership consists of very senior management people from each major product line organization and certain corporate staff departments.

The council is evaluating spares management practices and directing appropriate actions to improve and unify our corporate activities in this area.

As a result of that council, we are :

Consolidating spares with production orders through joint planning with our customers and more thoughtful schedules of our own internal operations—much more aggressively than in the past.

Rejecting orders of spare parts which are available in Government supply channels.

Guiding Government purchasing organizations directly to the performing Hughes organization to avoid tiering of internal overhead costs.

Actively supporting breakout of parts we now purchase, inspect, and ship to customers with due regard for product reliability risks.

Seeking a fair and more understandable method of allocating spares management costs to spares orders.

In summary, the problem is complex, but fixable. Its solution will require DOD to concentrate on making economic order quantity buys and providing timely funding.

Its solution will require industry to concentrate on improving its cost performance and its management practices.

Together, DOD and industry must agree on a fair way to handle the costs of the spares management function. Above all, we all must be guided by commonsense to achieve the real purpose—readiness.

That concludes my comments. I will be pleased to respond to any questions you may have.

[The prepared statement with attachment of Mr. White follows:]

PREPARED STATEMENT OF DONALD H. WHITE, PRESIDENT, HUGHES AIRCRAFT CO.

Good afternoon. I am Donald H. White, President of Hughes Aircraft Company. I appreciate the opportunity to appear before this Committee to present my views on Department of Defense Spare Parts Procurement.

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Even fully recognizing this point, we must still address spares acquisition problems. I will direct my comments to three aspects of this subject: First, My views on the cause of the "Spare Parts Problem"; Second, some ideas for solving that problem; Finally, a description of the actions that Hughes Aircraft Company has taken to improve our own spares management.

The basic problem in the acquisition of spare parts is *not* the cosmetic one of overpricing so emphasized in the media. The basic problem lies fundamentally in the inefficient and uneconomical way in which spare parts are acquired.

Costs of spares are not quite as simple as is often perceived. The value of a spare part is commonly thought to be the cost of material, labor and overhead—that is seen as its intrinsic costs. Another, less obvious, but essential cost, is that of spare parts management functions—whether performed by the contractor or by the Government. These management functions include work such as planning for the acquisition of spares, screening of spares orders for potential sources, pricing, ordering, inspecting, shipping, documenting, etc.

In order to reduce the cost of spare parts, both the intrinsic costs and management function costs must be attacked. A basic intrinsic cost problem is the government's inability (I) to order ineconomic quantities; (II) to consolidate requirements; and, (III) to fund without constraints and delays. Industry must tighten up its management of intrinsic cost elements—the efficiency of the production work performed. While the management function costs must also be severely controlled by contractors, they must be recognized, and dealt with, as real costs. We must resist unrealistic requirements such as "grass roots" individual manual pricing of each spares item, for it would swamp all of us with massive detail that would be costly, time consuming and invite error.

A fundamental problem involves allocation of the costs of the management functions. In many instances the pricing methods employed by contractors have resulted in disproportionate loading of low dollar value spare parts—even though the pricing methods have fully met contractual and cost accounting standards. In doing so, we shot ourselves and our customers in the foot with prices that appear unrealistic and cannot be understood by the public.

I recently took a statistical look at our current spares orders. Those results are attached to my written testimony. They are startling. They show that 85 percent of all of our spares orders account for only about 5 percent of the total value. Obviously, they are individually very small! The pricing problems of which I've read seem to lie primarily in this low value segment. I strongly urge that the Congress and DOD carefully assess the problem, and not permit themselves to be stampeded into correcting a five percent apparent problem to the detriment of the remaining 95 percent.

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In summary, the problem is complex, but fixable. Its solution will require DOD to concentrate on making economic order quantity buys and providing timely funding. Its solution will require industry to concentrate on improving its management practices. Together, DOD and Industry must agree on a fair way to handle the costs of the management function. Above all, we must be guided by commonsense to achieve the real purpose: Readiness!!

That concludes my comments. I will be pleased to respond to any questions you may have.

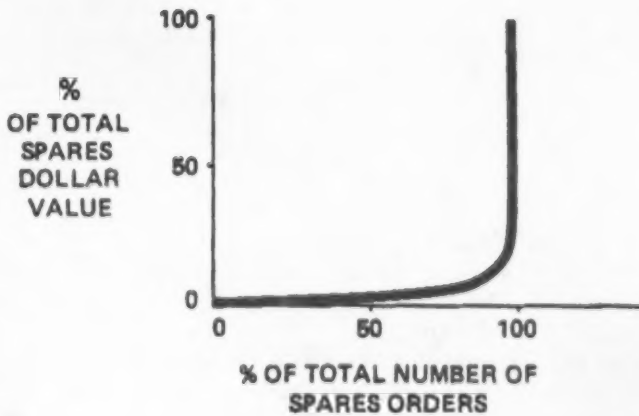
ATTACHMENT TO 10/27/83

TESTIMONY OF DONALD H. WHITE OF
HUGHES AIRCRAFT COMPANY

HUGHES AIRCRAFT SPARES STATISTICS

(ANNUAL SPARES ACTIVITY AS OF SEPT. 83)
- APPROXIMATELY \$500M -

ORDER SIZE	LESS THAN \$10K	BETWEEN \$10K-\$100K	BETWEEN \$100K-\$1M	MORE THAN \$1M
PORTION OF ORDERS	35%	50%	10%	5%
PORTION OF DOLLAR VALUE	0.5%	5%	12%	82.5%



Senator NUNN [presiding]. Mr. Tower will be back in just a minute. I have one question; I know we have other witnesses and we have a deadline approaching here as far as our presence on the floor.

You mentioned that competition is sometimes not practical, as I understand it, and that you have found that close development between your supplier companies and your companies are in some cases more efficient.

What percentage does your company use in terms of competition after you get the contract in dealing with the subcontractors?

Mr. WHITE. I don't have that exact figure.

Senator NUNN. Just ballpark.

Mr. WHITE. Probably in terms of direct price competition, less than 50 percent is direct price competition.

Senator NUNN. It would be less than what Mr. Wegner indicated for Pratt & Whitney?

Mr. WHITE. Yes.

Senator NUNN. What percentage do you think is a reasonable goal for the Government to shoot for in terms of competition for spare parts?

Mr. WHITE. First, we have to determine is the Government going to solve the problem of consolidating orders because if you have a lot of very small orders, it is impractical.

Senator NUNN. Assuming they use computers the way the study yesterday said they could be used to have consolidation, assuming that, then what?

Mr. WHITE. Given that assumption, I think probably something in the area of 50 to 60 percent is likely.

Senator NUNN. If you don't consolidate orders, then competition is not practical?

Mr. WHITE. I think that is right. I think the orders are so small that the cost of doing the competition itself would exceed the cost of the parts.

Obviously, that is not an efficient approach.

Senator NUNN. Do you have any other specific recommendations as far as the Department of Defense is concerned in spare parts or as far as we are concerned in the Congress?

Mr. WHITE. I think the Department of Defense actions on the Secretary's 10 points are well taken and will help solve the problem.

I do think that we need to give more attention to the spares management problem because that is one that has been ignored really in all of the discussions.

We in industry try to do that typically. We do that function and apply the cost of doing that function to the spare parts. As a result of how we apply that cost, and it is applied in different ways, in some cases it is applied on a per order basis.

Obviously, if you have a very small order and apply a piece of a large element of cost to that, you can apply an amount to that order that is a lot more than the cost of that one spare part that was ordered.

That, I think, is the genesis of many of the horror stories you see. I think we need to arrive at an agreement with the Department of Defense as to how those costs will be handled. Perhaps they should not be applied to cost of spares.

Perhaps they should be separately contracted on a line item basis. I think that is something we need to work on.

Senator NUNN. Thank you.

Senator Levin?

Senator LEVIN. Thank you, Senator Nunn.

I am wondering, Mr. White, if you could give us the figure for your company that we got from Mr. Wegner for his company. He said about 60 to 65 percent of the orders being placed for spare parts by Pratt & Whitney are being placed sole source.

What is a comparable figure for your company?

Mr. WHITE. I don't have that figure, but we can get it.

[The information follows:]

Mr. WHITE. The current procurement data base at Hughes is not programed to provide a precise answer to your question, but a collective current survey of all the procurement organizations at Hughes results in an estimate that about two thirds of our spares procurement is placed single/sole source.

During the production phase of a program, spares pricing reaps the benefits of larger quantities of component procurements. When a system is no longer in production, generally, it is most cost effective to remain with the established source because of existing tooling, expertise, and supplier business interests. New suppliers have a diminishing interest in dedicating resources to obsolete technologies and programs. Occasionally, after a number of years, some suppliers' interests change to a degree that offers a cost effective opportunity to once again compete the spares pricing.

Senator LEVIN. Would you estimate it is about the same?

Mr. WHITE. I suspect it is higher than that.

Senator LEVIN. In what percentage of the cases that we buy from you sole source would you estimate that you have competition that we could go and compete for?

Mr. WHITE. In many of the cases we have a supplier. Now, that supplier in many cases is a potential competitor to us on a part.

In fact, if we have a supplier for the part and if that part is something that is not incorporated into, let us say, a very critical component of a system, but is something that is a line replaceable part, then the Department of Defense can buy directly from that supplier and that is the break-out process that we have been talking about and we support that.

Senator LEVIN. What percentage of the cases that we purchase from you sole source would you estimate that we could go to your supplier and buy directly or compete for it?

Mr. WHITE. That would be just a stab in the dark.

Senator LEVIN. Would it be that there are obviously a number of situations?

Mr. WHITE. I think there are a lot. There are a lot of standard electronic components that can be procured from a lot of sources. Most of them are already in the Government supply system or a number of them are already in the Government supply system.

We would be very careful not to accept orders for those to make sure they are procured from the suppliers.

Senator LEVIN. So that the break-out possibilities are significant?

Mr. WHITE. I think they are quite significant, in electronics particularly.

Senator LEVIN. That means as of right now if we wanted to, we could compete significantly more than we do?

Mr. WHITE. I think probably you could.

Senator LEVIN. Thank you, Mr. White.

Chairman TOWER. The committee will hear next from Mr. Bruce Hahn, the governmental affairs manager of the National Tooling and Machining Association, and from Mr. Vincent Kearns, president of B. H. Aircraft, and his brother, Robert Kearns, who is vice president and treasurer.

The National Tooling and Machining Association represent a large group of tooling and machining companies, many of which manufacture the spare parts which are in controversy today. Some of these companies deal directly with the Government, many more deal indirectly through prime manufacturers.

Mr. Vincent Kearns and his brother have a particularly interesting story to tell of their experience in winning a Government contract to build a spare part for the F-100 engine.

Gentlemen, we welcome you and are pleased that you have accepted the committee's invitation to appear this morning.

Gentlemen, we welcome you. We are pleased to have you.

I will ask Mr. Kearns to proceed first.

You may submit anything you would like for the record and summarize your statement.

There is a vote on the floor. So, I will recess the committee for approximately 5 to 10 minutes so that Members may go vote. When we return these gentlemen will proceed.

The committee will stand in recess for 10 minutes.

[Recess.]

Senator WARNER [presiding]. We will now resume the hearing.

We will now receive the testimony of representatives of B. H. Aircraft, Inc.

STATEMENTS OF VINCENT E. KEARNS, PRESIDENT; AND ROBERT F. KEARNS, VICE PRESIDENT AND TREASURER, B. H. AIRCRAFT CO., INC.

Mr. VINCENT KEARNS. Mr. Chairman and Members of the committee, we are pleased to appear before you today, to discuss our company's experience over the past 2 years in attempting to bid on spare part solicitations by the U.S. Air Force.

Our experiences certainly qualify for the category of horror stories. However, we believe that the Air Force has learned a great deal in addressing procurement system weaknesses highlighted by our bidding efforts.

For over 50 years, B. H. Aircraft Co., Inc., has been a leading fabricator of precision sheet metal weldments for the aircraft industry, concentrating in recent years on the manufacture of commercial jet aircraft engine components.

For all practical purposes, we had no experience in dealing with Government procurement agencies on a direct basis prior to November 1981. The parts we will review today were brought to our attention as advertised solicitations and the bidding history of these parts was intriguing.

Past awards of contracts on the F-100 engine spare part known as the augmentor divergent nozzle segment reflected significantly rising

unit bids by two competing sources, N. V. Philips of the Netherlands and Pratt & Whitney Aircraft [PWA], and recent contracts were being won by N. V. Philips.

My brother will bring you samples of the parts, Mr. Chairman. We will highlight some of the pricing experiences on the VuGraph.

In our initial contact with San Antonio Air Logistics Center [SAALC] procurement personnel, we were informed that a contract for this item could only be awarded to an approved source.

SAALC suggested that the most expedient way to gain approved status would be through PWA, since the Air Force did not have a formalized qualification procedure for engineering source approved parts. We concluded that PWA would have no incentive to approve us as a competitor, so we set out to prove our capabilities to SAALC.

On subsequent visits we gained access to the military commanders at SAALC who seemed anxious to involve us in the program once they were shown the sharply escalating cost at which this assembly had been procured. Hearing that we could save them at least \$15 million on the current solicitation, the chain of command ordered doubting engineers to listen up.

Numerous meetings with SAALC procurement and engineering personnel followed, during which we explained how we would manufacture the part.

The structural integrity of this assembly is primarily dependent upon the quality of welds joining details procured from a list of approved sources. In submitting weld samples, we felt that the requisite engineering source approval should have been given to us, and we were led to believe such would be forthcoming.

The original solicitation date had been delayed for 3 weeks to April 2, 1981, in order that the deputy chief of the Propulsion Management Division at SAALC be given more time to find a way to grant us engineering source approval.

Noting in March 1982 that second thoughts concerning our capabilities were being generated, we began to build two sample parts at our own expense. Several trips to San Antonio and Wright-Patterson Air Force Base proved fruitless in trying to determine how the Air Force wanted us to prove our capabilities.

On the bid submission date of April 2, 1982, we learned that all our efforts had been in vain and our bid could not be accepted. We could not be granted engineering source approval until perhaps as many as five samples had been submitted to SAALC for some form of engine testing.

In May 1982 we approached engineering personnel with two completed assemblies which were fitted on an engine module in the over-haul shop at SAALC. Since this effort was not successful in winning qualification approval, we decided that additional steps would be necessary to break down the stone wall being erected by the Air Force.

After filing a protest with the General Accounting Office, we requested correspondence and memoranda from the contract file in order to determine how the source qualification had been determined.

The only documentation concerning definitive qualification criteria was dated subsequent to the bid opening date and had been established for the Air Force by PWA. No such qualification criteria were communicated to us in writing by SAALC until July 7, 1982.

Mr. Chairman, it was clear to us in early meetings with engineering personnel at SAALC that we were dealing with relative lightweights charged with assessing our manufacturing capabilities.

Logistics Center engineering personnel have functioned as overhaul and repair supervisors in the past, and they simply had no training in differentiating our manufacturing capabilities from that of a corner garage.

A series of communications between SAALC, PWA [Florida], and Wright-Patterson Air Force Base in Dayton highlights the fact that no one up and down the chain of command knew what to do with us, either.

Perhaps nagging at their conscience was the dramatic impact of our involvement on the bids of the other parties, and that maybe the Air Force should take B. H. Aircraft as seriously as did the competition.

Appendix A of our statement summarizes the recent bidding history of the augmentor divergent nozzle segment. The solicitation file indicates that both N. V. Philips and PWA were informed of our attempt to become a qualified source for this part, for a 3-week delay in accepting bids had been explained as so related.

In response to a telephone call we confirmed to PWA, that we were submitting a bid, and explained that, to our mind, either someone was picking their pocket on pricing or they were deliberately losing this work to the Europeans under the guise of some NATO memorandum of understanding.

In other words, gentlemen, we smelled a rat.

We eventually were able to hammer out five samples for SAALC and became a qualified source for the part in January 1983. The solicitation had remained open because our protest to the General Accounting Office remained unresolved.

Subsequent to an Air Force reassessment of quantity requirements, the solicitation for 15,723 pieces was canceled in February 1983, and as low bidder we were awarded a contract in May 1983 for a reduced quantity of 7,223 pieces.

Gentlemen, the information on these charts is attached to our submission as appendices A and B.

Further investigations on our part showed a number of similar pricing patterns on F-100 spare parts, whereby European manufacturers were underbidding PWA. We attempted to bid on another F-100 spare part called a convergent liner assembly, the bidding history of which is attached as appendix B.

Somewhat more confident by this time in our manufacturing capability, the Air Force approved us as a qualified source on the basis of our once having manufactured a similar part.

On September 9, 1982, N. V. Philips reconfirmed its April 2, 1982 bid price, \$360 per unit. Less than 60 days later, after our having been listed as an approved source on a subsequent solicitation, the bid of N. V. Philips dropped in dramatic enough fashion to win the contract.

This price is shown on the VuGraph as \$188.

Our allegations of unusual activity on the part of certain individuals involved in the solicitations discussed above have been appropriately addressed by the Department of Defense Inspector General, the Federal Bureau of Investigation, the Criminal Division of the Justice

Department, the General Accounting Office, and the staff of the Secretary of the Air Force.

The lesson to be learned by the Air Force is that effective management of resources can never be set on automatic pilot.

Our experience indicates that no one was reviewing escalating unit prices at SAALC and an unimaginative clerk was responsible for the disbursement of millions of dollars.

Procurement officials were being pressured to engender competition while their engineering counterparts had no incentive to assume the heavy responsibility of approving alternative sources.

It is imperative that the Air Force establish definitive procedural guidelines to be in place the next time a B. H. Aircraft Co. comes out of the woodwork.

A new supplier expects to go through qualification procedures which are objectively related to industry standards. We are pleased to note that recent policy initiatives announced by the Secretary of Defense and procurement system improvements drafted by Air Force personnel are steps in the right direction.

You should be pleased that a small business can still penetrate the bureaucracy of the Pentagon and effect positive changes within the system, but we cannot imagine our tenacity to be typical. It took a great deal of time, travel, and money to accomplish our goal.

We neither requested nor received special treatment from Government agencies. We can certainly support the statement made earlier in the hearings, that it is not easy to do business with the Government.

Mr. Chairman, this completes our prepared statement, and we will be pleased to answer any questions.

[The prepared statement of Messrs. Kearns follows:]

PREPARED STATEMENT OF VINCENT E. KEARNS, PRESIDENT, AND ROBERT F. KEARNS, VICE PRESIDENT AND TREASURER, B. H. AIRCRAFT CO., INC.

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we could save them approximately 15 million dollars on the current solicitation, the chain of command ordered doubting engineers to listen-up.

Numerous meetings with SAALC procurement and engineering personnel followed, during which we explained how we would manufacture the part. The structural integrity of this assembly is primarily dependent upon the quality of welds joining details procured from a list of approved sources. In submitting weld samples, we felt that the requisite engineering source approval should have been given to us, and we were led to believe such would be forthcoming.

The solicitation date had been delayed for three weeks to April 2, 1982 in order that the deputy chief of the propulsion management division at SAALC be given more time to find a way to grant us engineering source approval. Noting in March 1982 that second thoughts concerning our capabilities were being generated, we began to build two sample parts by hand. Several trips to San Antonio and Wright Patterson Air Force Base proved fruitless in trying to determine how the Air Force wanted us to prove our capabilities.

On the bid submission date of April 2, 1982, we learned that all our efforts had been in vain and our bid could not be accepted. We could not be granted engineering source approval until five samples had been submitted to SAALC for some form of engine testing.

After filing a protest with the General Accounting Office, we requested correspondence and memoranda from the contract file in order to determine how the source qualification had been determined. The only documentation concerning definitive qualification criteria was dated subsequent to the bid opening date and had been established for the Air Force by PWA. No such qualification criteria were communicated to us in writing by SAALC until July 7, 1982.

Mr. Chairman, it was clear to us in early meetings with engineering personnel at SAALC that we were dealing with relative "light-weights" charged with assessing our manufacturing capabilities. Logistics center engineering personnel have functioned as overhaul and repair supervisors in the past, and they simply had no training in differentiating our manufacturing capabilities from that of a corner garage. A series of communications between SAALC, PWA (Florida), and Wright Patterson Air Force Base in Dayton highlights the fact that no one up and down the chain of command knew what to do with us, either. Perhaps nagging at their conscience was the dramatic impact of our involvement on the bids of the other parties, and that maybe the Air Force should take B. H. Aircraft as seriously as did the competition.

Appendix A summarizes the recent bidding history of the augmentor divergent nozzle segment. The solicitation file indicates that both N. V. Phillips and PWA were informed of our attempt to become a qualified source for this part, for a three week delay in accepting bids had been explained as so related. We had confirmed to PWA upon request that we were submitting a bid, and explained that, to our mind, either someone was picking their pocket on pricing or they were deliberately losing this work to the Europeans under the guise of some NATO memorandum of understanding.

We eventually were able to hammer out five samples for SAALC and become a qualified source for the part in January 1983. The solicitation had remained open because our protest to the General Accounting Office remained unresolved. Subsequent to an Air Force reassessment of quantity requirements, the solicitation for 15,723 pieces was cancelled in February 1983, and as low bidder we were awarded a contract in May 1983 for a quantity of 7,223 pieces.

A number of similar pricing patterns on F-100 spare parts came to our attention, whereby European manufacturers were underbidding PWA. We attempted to bid on another F-100 spare part called a liner assembly, the bidding history of which is attached as appendix B. Somewhat more confident by this time in our manufacturing capability, the Air Force approved us as a qualified source on the basis of our once having manufactured a similar part. On September 9, 1982, N. V. Phillips reconfirmed its April 2, 1982 bid price. Less than sixty days later, after our having been listed as an approved source on a subsequent solicitation, the bid of N. V. Phillips dropped in dramatic enough fashion to win the contract.

Our allegations of fraudulent activity on the part of certain individuals involved in the solicitations discussed above have been appropriately addressed by the Department of Defense Inspector General, the Federal Bureau of Investigation, the Criminal Division of the Justice Department, the General Accounting Office, and the staff of the Secretary of the Air Force.

The lesson to be learned by the Air Force is that effective management of resources can never be set on automatic pilot. Our experience indicates that no one was reviewing escalating unit prices at SAALC and an unimaginative clerk was responsible for the disbursement of millions of dollars. Procurement officials were being pressured to engender competition while their engineering counterparts had no incentive to assume the heavy responsibility of approving alternative sources.

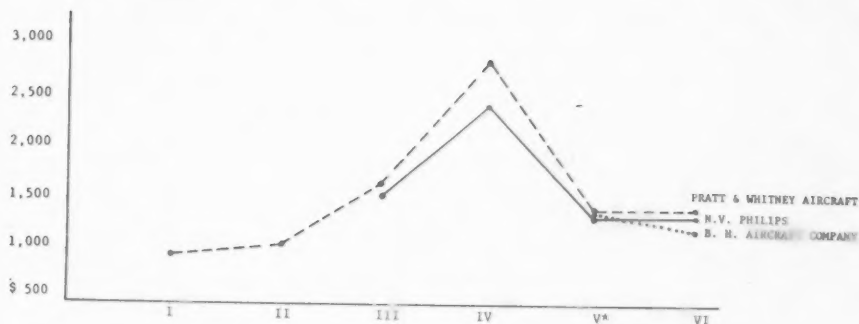
It is imperative that the Air Force establish definitive procedural guidelines to be in place the next time a B. H. Aircraft Company comes out of the woodwork. A new supplier expects to go through qualification procedures which are objectively related to industry standards. We are pleased to note that recent policy initiatives announced by the Secretary of Defense and procurement system improvements drafted by Air Force personnel are steps in the right direction.

You should be pleased that a small business can still penetrate the bureaucracy of the Pentagon and effect positive changes within the system, but we cannot imagine our tenacity to be typical. Hopefully, our experience will result in more opportunities for our fellow National Tool and Machining Association members and other small businesses in competing for Government contracts.

Mr. Chairman this completes our prepared statement, and we will be pleased to answer any questions.

PRICING HISTORY
 PART NUMBER 4058690
 AUGMENTOR DIVERGENT NOZZLE SEGMENT
 F-100 ENGINE

APPENDIX A



BID NO.	AMOUNTS	BID DATES	AMOUNTS		
			Philips	Pratt & Whitney	H. Aircraft
I (cost reneq.)	713	5-31-78	---	994.48	---
II (cost reneq.)	210	5- 5-80	---	1,017.36	---
III (firm fixed price)	132	1-15-81	1,537.00	1,634.45	---
IV (firm fixed price)	6,543	7-31-81	2,469.00	2,801.74	---
V (firm fixed price)	15,723	4- 2-82	1,318.00	1,400.00	1,395.00
VI (firm fixed price)	7,223	3-18-83	1,318.00	1,400.00	1,234.00

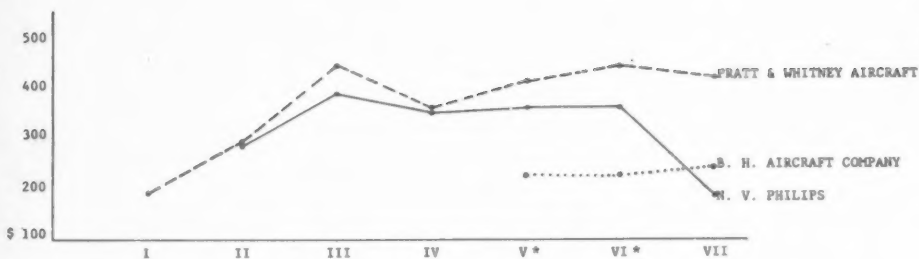
EFFECT OF N.V. PHILIPS PRICE DECREASE FROM BID IV

TO BID VI: $62,469 - 1,318 = \$1,151 \times 7,223 = \$8,313,763.$

* Solicitation cancelled with no award

PRICING HISTORY
PART NUMBER 4051378
LINER ASSEMBLY,
F-100 ENGINE

APPENDIX B



BID NO.	QUANTITY	BID DATES	AMOUNTS		
			Philips	Pratt & Whitney	S. H. Aircraft
I	50	8-1-80	---	191.44	---
II	283	12-22-80	285.27	293.47	---
III	99	8-13-81	385.00	443.09	---
IV	34	4-10-82	350.00	355.82	---
V*	10,753	4-12-82	360.00	402.57	225.00
VI*	8,876	9- 9-82	360.00	437.91	225.00
VII	11,806	10-28-82	188.00	415.07	245.00

EFFECT ON N. V. PHILIPS PRICE DECREASE, BID VII:

$$\$360 - \$188 = \$172 \times 11,806 = \$2,030,632.$$

*Solicitations cancelled with no award

Senator WARNER. Could you once again go over the reasons that prompted you to enter this competition besides trying to make a reasonable profit?

Mr. VINCENT KEARNS. We noticed the tremendous price increases in the history of this part. We felt if U.S. domestic suppliers could produce a part for half the dollars the Europeans were producing, we should at least be offered the opportunity to submit a bid.

Senator WARNER. What reduction in cost did you note once you entered that competition?

Mr. VINCENT KEARNS. The competition dropped their prices drastically. On the previous solicitation, in which we did not take part, prices were submitted at \$2,469 by N. V. Philips and \$2,800 by Pratt & Whitney.

Once we entered the competition, N. V. Philips' price dropped to \$1,300 each, Pratt & Whitney's dropped to \$1,400.

Senator WARNER. You don't have to answer the question, of course, but why do you think the price was so high to begin with?

Mr. VINCENT KEARNS. There was no incentive to reduce the price, as Senator Levin mentioned earlier, when the systems that we are dealing with, run by the Federal procurement agencies are so dense.

Senator WARNER. You believe in other contracts comparable price reductions can be achieved by this competitive means?

Mr. VINCENT KEARNS. We looked at approximately 60 parts on the F-100 engine that were engineering source approved parts and were only approved to Pratt & Whitney and 1 of 2 European manufacturers.

Yes, sir, I certainly believe there is a strong possibility all these unit prices could be cut in half.

Senator WARNER. Senator Thurmond?

Senator THURMOND. I just have this question.

If you were representing the Government in the Pentagon, what would you recommend to prevent these cost increases which in the eyes of the public are considered excessive costs?

What would you, or what course would you follow to bring down these costs?

Mr. VINCENT KEARNS. Senator, I would recommend a complete overhaul of the Government procurement system.

Senator THURMOND. I did not hear you.

Mr. VINCENT KEARNS. A complete overhaul of the Government procurement system. You have individuals out there doing the buying whose greatest concern is pushing paperwork.

Now, the Government procures items much differently from private industry and the amount of paper is staggering. It becomes a high priority for the buyers and clerks, who are signing off on the orders, that their priorities are met and that is making sure all the paperwork is filled out correctly.

Now, the pricing is secondary. Everything else is secondary. You can't run a business this way and that is what these people are trying to do.

Senator THURMOND. I will be glad to hear from the others.

Mr. VINCENT KEARNS. Pardon me, sir.

Senator THURMOND. I will be glad to hear from any others. Are these people all with you?

Mr. HAHN. No, we have our own presentation here.

We would agree. I think the illustration up there is indicative. It is substantiated by several studies done by the Federal Government, SBA, and one done by GAO which was a followup.

Every time they took a sole-source procurement and put it out competitively, the savings amounted to 40 or 50 percent. GAO estimated those numbers were low. Right now only 10 percent of the total dollars of the \$13 billion that are purchased each year are purchased competitively.

Therefore, the solution is a very simple one. Overhaul the system and remove the impediment to competitive procurement.

Mr. ROBERT KEARNS. In the solicitation pictured on the preceding slide, which would be bid No. 4 on the chart, there was an interesting statement made by the buyer.

At that point in time the buyer wrote, concluding on the evaluation of bids submitted, that "Prices appear reasonable because I have adequate competition with two parties bidding."

She did not attempt to compare the prices submitted at that time with the prices submitted in earlier bids by the two competing parties, which was a point raised in testimony earlier this morning.

One has to compare what he bought something for the last time before deciding on the reasonableness of the current price.

Senator THURMOND. Thank you very much.

Senator WARNER. Senator Nunn?

Senator NUNN. I want to congratulate you for being so persistent in overcoming obstacles and eventually saving the Government a great deal of money and also hopefully making some profit yourselves. I assume that is part of your aim?

Mr. VINCENT KEARNS. We hope that eventually we will.

Senator NUNN. How long has your company been in business?

Mr. VINCENT KEARNS. Fifty years.

Senator NUNN. How long have you been involved in trying to get Government business?

Mr. VINCENT KEARNS. Our first real attempt began in November 1981 on these particular parts.

Senator NUNN. Are you encouraged enough that you are going to continue?

Mr. VINCENT KEARNS. Well, we will have to, as you say, see if we make a profit first on our existing order. It is an expensive, time-consuming operation, as you can well imagine.

We have written to Air Force personnel requesting approval on additional parts—this is in the mill right now—so that we can bid on them, not that we will win the orders, but that we can bid on them.

Senator NUNN. I have been told by people who have followed the procurement process a long time over the last 20 or 30 years, every time we have identified a problem in procurement, another set of rules and regulations are added and another set of guidelines.

While you might justify any one particular set of rules and regulations aimed at any one policy, the cumulative effect of all of them is so overwhelming that we in effect stifle competition other than from larger companies.

Do you think that is a generally valid observation?

Mr. VINCENT KEARNS. Absolutely correct. Not only stifle the competition, I think it is stifling the people who work within the system. We came across some very astute individuals, but it seemed that the system had them hamstrung, they couldn't operate the way they would normally want.

Senator NUNN. It is not the fault of the bureaucrats. They are told what to do and they have their own guidelines; is that right?

Mr. VINCENT KEARNS. Yes, sir.

Senator NUNN. I assume it would be very frustrating for those in the bureaucracy who do have good judgment and commonsense, and I am sure we have many in that category, to recognize the counterproductiveness of much of what is being done.

Mr. VINCENT KEARNS. I couldn't relate to you how many times I have heard that statement.

Senator NUNN. If we made you the dictator over at the Department of Defense, what would you do to cut down on that paperwork and rules and regulations?

Let us assume that the Congress would go along, for the purpose of the question.

Mr. VINCENT KEARNS. I think you should study the procurement process of the primes and see how they go about their business. You are competing in the same arena they are, procuring the same kind of parts, and simplify the paperwork procedures so that the buying people on the bottom, who actually have to do the work, have a chance to use commonsense and find out what pricing is about.

Senator NUNN. Do you think we ought to get a task force of prime contractors over there for advice or would that pose a conflict of interest problem?

Mr. VINCENT KEARNS. I think it would be simple enough to get copies of their purchase orders, their forms and basically copy them.

Senator NUNN. That is a good suggestion.

We heard testimony a little while ago, in answer to questions I posed, as to what percentage of the Government's spare parts business could be competitive.

Two of the prime contractors answered 50 to 60 percent.

Would you share that assessment? Would your assessment be higher or lower?

Mr. VINCENT KEARNS. Were you speaking on a dollar level or parts?

Senator NUNN. My question was posed on the dollar level. You can answer it either way.

Mr. VINCENT KEARNS. On the spare parts you could probably compete 95 percent of it. However, I am not sure that is the right thing to do.

I think what the Government should be looking for is the best price, which is not necessarily the lowest price, because of the support functions needed to get along in this business.

Senator NUNN. That comment was that they compete 50 to 60 percent of theirs. These were prime contractors. Of course, the Air Force study—that is the only study I know of, there may be others—showed, I think, the Air Force itself in its spare parts procurement procured about 21 percent on a competitive basis.

I am told by staff that overall the DOD figure would be lower than 21 percent. That means if the prime contractors are correct in their as-

essment, we could double the amount of competition in spare parts pretty readily.

Would you agree generally with that?

Mr. VINCENT KEARNS. Certainly if that is the number they were coming up with and I heard those numbers, myself. If they can buy outside so can the military.

Senator NUNN. Do you believe there are other small businesses—I don't know how small you are, maybe you are not—how do you characterize yourself?

Mr. VINCENT KEARNS. We are small.

Senator NUNN. I am on the Small Business Committee. The only definition I have heard that stands up is one that doesn't have a full-time Washington lobbyist.

Do you qualify?

Mr. VINCENT KEARNS. We do not have a full-time Washington lobbyist.

Senator NUNN. How many of them are out there like you, in your opinion? Are there a lot of them? Is there great potential for increasing the amount of business participated in by small businesses?

Mr. VINCENT KEARNS. I am sure there are thousands of companies out there in the machining end of the business in particular.

We are somewhat unique. It goes back to the fact our roots are relatively deep in this industry, being in business for over 50 years. There are probably 20 companies we would compete with for the prime business on the type of parts we build.

Senator NUNN. A lot of them are not competing for Government parts?

Mr. VINCENT KEARNS. I think more and more are getting into it.

Senator NUNN. You mean by opening up competition, reducing paperwork and complexity, we could greatly increase the number of people interested in this business?

Mr. VINCENT KEARNS. Yes, sir.

Senator NUNN. So, they are out there? It is just a matter of Government changing?

Mr. VINCENT KEARNS. Yes. The avenues have not been opened to them and trying to get through the 6-foot snowdrift with a toothpick is difficult.

Senator NUNN. Thank you very much. We appreciate your testimony.

Senator WARNER. Senator Levin?

Senator LEVIN. Thank you, Mr. Chairman.

First, let me thank the National Tooling and Machining Association for the continuing support that they have given us on some reforms around here. We have had a number of battles in the last few years that we have won. We have lost a few, too, to try to open up this process to competition.

The ones we have won we have had the support of the association. We are grateful for it. They have been on the job here helping.

All those thousands of small businesses that Senator Nunn and you were talking about are benefiting in this effort to open up the contracts to competition.

You first went to the San Antonio Air Logistics Center to be approved as a source. Is that correct?

Mr. VINCENT KEARNS. Yes, sir.

Senator LEVIN. As I gather, they suggested that the most expedient way you could be approved would be if you went to Pratt & Whitney who is a potential competitor of yours; is that correct?

Mr. VINCENT KEARNS. Yes, sir.

Senator LEVIN. Will you tell us again what happened and what went through your mind at that moment?

Mr. VINCENT KEARNS. I recalled the story of the fox running through the henhouse when they let him in. They didn't have the wherewithal, they don't have the people who are technically qualified to judge whether someone coming in cold, more or less, can actually manufacture the part, which disturbed me.

Of course, we were used to dealing with private industry for 50 years and we were used to dealing with technically capable people. They didn't have the wherewithal to say yes or no to us.

They investigated our background, noticed that we did produce this type of part in the past, but wanted to more or less shirk the responsibility of approving it. That is, the engineering group did.

Now, it is very convenient for them to lean on Pratt & Whitney and the other primes of the world to take this responsibility off their hands.

Senator LEVIN. What precisely did they tell you regarding how to get qualified?

Mr. VINCENT KEARNS. "We don't know what to do right now. We will investigate."

These are statements they made us:

"This engine is currently being handled by Wright-Patterson Air Force Base as well as Kelley Air Force Base. We don't know whether the approval should be at Wright-Patterson or Kelley."

We went back and forth. We kept a few airlines alive and profitable during that time.

Senator LEVIN. How did the question of going to Pratt & Whitney for approval come up?

Mr. VINCENT KEARNS. Pratt & Whitney included their source, which was licensee, N. V. Philips. They thought we should go to Pratt & Whitney and get them to approve us as well.

In this case, it is easier said than done. In this case they had no reason to approve us. Why should they? They were businessmen, too, and hopefully competing for a contract. They don't want me in on the picture if they can help it.

Senator LEVIN. Mr. Chairman, I would like to ask the Air Force how often this happens. This is an incredible story.

What we are hearing is that they were told by the Air Force to go to their competitor for approval, that if they were going to be allowed to bid by the Air Force, they had to be qualified and the Air Force said, "We don't have the facilities for that, go to Pratt & Whitney, see if they can qualify you."

Pratt & Whitney are the people they are trying to compete against. They are being told by the Air Force to go to their competitor for approval.

I would like to know from the Air Force how common that is that the Air Force is telling somebody to go to their competitor for approval.

Senator NUNN. I am afraid it is pretty common. It is an excellent point you make because the Inspector General testified yesterday that that was done very frequently. I am afraid this is not an isolated case.

Senator LEVIN. We would like to get the Air Force to tell us how often, if they could for the record, that is done. Is it 25 percent of the time when people seek qualification, 50 percent, or 75 percent?

[The information follows:]

PROCEDURES ON APPROVING ALTERNATE MANUFACTURING SOURCES—AIR FORCE

The Air Force does not delegate its responsibility for approving alternate manufactures. It is our policy to procure replenishment spare parts competitively to the maximum extent practicable consistent with technical, safety, durability, reliability, and economic considerations.

Using engines as an example, generally, it is not feasible for the Government to either provide engines for, or to conduct lengthy alternate source qualification tests. Neither does the Government have the technical manpower, facility resources, nor the funds that would be needed to afford equal opportunity in all cases. Also, for a part for which the Government does not have, and may not be in a position to acquire complete technical data necessary for proper qualification, the Government cannot entertain requests for qualification. In these circumstances, the interested contractor or the Government may make arrangements for qualification with the original engine manufacturer (OEM).

The Air Force does not have any data available to generate a figure for how often a new source is tested/approved by the OEM.

Senator LEVIN. Let me go to another subject. We are looking at a very dramatic chart there. I wish every American could see the impact of competition on procurement, how much less we pay when there is competition.

Something happened when you came into the scene, which is very obvious, the Philips price plunged to just a point right below your bid which I am sure everybody will assume is the law of coincidence and chance.

My question is this: Did something happen there untoward or unexpected relative to the disclosure of the fact that you were bidding?

Mr. VINCENT KEARNS. In September 1982 they reaffirmed their price. The only thing that happened in between was that they were notified that we were now a third approved source.

Senator LEVIN. Who was notified?

Mr. VINCENT KEARNS. Both Pratt & Whitney and N. V. Philips.

Senator LEVIN. Is that the normal practice that private people be notified?

Mr. VINCENT KEARNS. They tell me it is.

Senator LEVIN. Who took the initiative to notify?

Mr. VINCENT KEARNS. The Air Force procurement personnel in San Antonio.

Senator LEVIN. Then what happened?

Mr. VINCENT KEARNS. A new solicitation was issued to the three parties and the quantity changed slightly. This was their excuse for a new solicitation, listing us as a third approved source.

The three parties bid and N. V. Philips for some reason dropped their price.

Senator LEVIN. Was there any other disclosure, unfittingly or otherwise, you know about that might have affected it?

Mr. VINCENT KEARNS. Yes, sir. The original solicitations were submitted in April 1982. We were judged to be an unapproved source

by the procurement personnel and the buyers decided they could not do business with us.

That was changed later on, but initially that was their thought. The bids that were submitted by Philips and Pratt & Whitney were \$360 and \$402.

She then took the price we submitted of \$225 and according to a memo in her file, which we received through the Freedom of Information Office, she negotiated with both Pratt & Whitney and a representative of Philips and said a better price to pay for this part is \$225, which happened to be the price we had given her the week before.

She didn't call us out by name, but it is our opinion that later on when we were approved and brought into the bidding picture it would have been very apparent to people who were paying attention to business that perhaps this was an indication of where that \$225 price was coming from.

Senator LEVIN. Did you know she had mentioned that to them when you submitted your next bid?

Mr. VINCENT KEARNS. No, sir. We found that out about a year later.

Senator LEVIN. Was your protest filed on this?

Mr. VINCENT KEARNS. Yes, sir.

Senator LEVIN. Has that been resolved yet?

Mr. VINCENT KEARNS. The process was overruled.

Senator LEVIN. By whom?

Mr. VINCENT KEARNS. By the General Accounting Office.

Senator LEVIN. I would like to see a copy of that.

Does the staff have a copy of that opinion they could supply us?

[A copy of GAO protest follows:]

DECISION OF THE COMPTROLLER GENERAL OF THE UNITED STATES

File: B-219798.

Date: April 1, 1983.

Matter of: B. H. Aircraft Company, Inc.

DIGEST

1. Allegation of anti-trust violations is for consideration by the Attorney General, not GAO.

2. The possibility of a buy-in does not furnish a ground on which to protest a contract award.

3. A contract award necessarily includes a finding by the contracting officer that the awardee is responsible. GAO will not review an affirmative determination of responsibility absent a showing of fraud or an allegation that definitive responsibility criteria were misapplied.

4. Protest that solicitation did not contain a necessary enclosure goes to an impropriety in the solicitation. GAO therefore will not consider such a protest unless it is filed before the closing date for receipt of initial proposals.

B.H. Aircraft Company, Inc. protests the award of a contract to N.V. Philips under solicitation F41608-82-R-7254 issued by the Department of the Air Force for engine spare parts. B.H. Aircraft claims that the award to N.V. Philips was improper because of alleged anti-trust violations, the possibility of a buy-in, and the Air Force's failure to follow the regulations which govern how offeror responsibility should be determined. B.H. Aircraft also complains that the Air Force did not attach a required enclosure to the solicitation.

We dismiss the protest.

B.H. Aircraft first alleges that N.V. Philips and another supplier of engine spare parts are violating the anti-trust laws. Consideration of alleged anti-trust violations, however, is for the Attorney General, not our Office. McQuiston Associates, B-199013, September 1, 1981, 81-2 CPD 192. We therefore dismiss this ground of protest.

B.H. Aircraft next suggests that N.V. Phillips' offer reflects an attempt at "buying in" in that it allegedly is a below-cost offer in violation of Defense Acquisition Regulation (DAR) § 1-311 (1976 ed.).

The possibility of a buying-in, however, is not a proper basis upon which to challenge a contract award, since there is nothing inherently illegal about a buy-in. Swiss-Tex Incorporated, B-200809, B-200810, October 31, 1980, 80-2 CPD 333. Indeed, DAR § 1-311 does not prohibit award based on a below-cost offer, but only cautions that where there is reason to believe that a responsible firm has "bought-in" the contract officer should assure that amounts the contractor excluded in developing its price are not recovered in the pricing of change orders or otherwise. See Tombs & Sons, Inc., B-206810.2, May 10, 1982, 82-1 CPD 447. The protest on this issue is dismissed.

The third ground of B.H. Aircraft's protest is that the Air Force violated DAR § 1-905.3 by failing to request status reports regarding investigations of N.V. Phillips and the other supplier which were being conducted by the Defense Audit Service and the Justice Department at the time the contract was awarded. The regulation lists sources, such as "Government departments and agencies," from which information concerning an offeror should be obtained in connection with determining whether the firm is responsible, that is, capable of performing the contract.

The award of a Federal contract necessarily includes a finding that the awardee is responsible. DAR § 1-902; Warfield & Sanford, Inc., B-206929, April 20, 1982, 82-1 CPD 365. This Office will not review a contracting officer's determination that a prospective contractor is responsible unless the solicitation contains definitive responsibility criteria which allegedly have not been applied or there is an allegation of fraud or bad faith on the part of contracting officials. Kenilworth Trash Company, B-207314, May 18, 1982, 82-1 CPD 480. Since neither exception applies here, we will not consider the protester's complaint about the scope of the contracting officer's responsibility investigation.

Finally, B.H. Aircraft complains that the solicitation did not contain an enclosure referenced in the solicitation as attached. This allegation, however, relates to a solicitation impropriety which was apparent before the closing date for the receipt of initial proposals, and a protest on such a ground must be filed before that date. 4 C.F.R. § 21.2(b)(1) (1982). Since this protest was not filed until after an award had been made, it is untimely.

The protest is dismissed.

HARRY R. VAN CLEVE,
Acting General Counsel.

Senator LEVIN. What was the gist of their overruling? Are you able to summarize it in 1 minute or 2?

Mr. VINCENT KEARNS. My brother might be able to give you that information.

Senator LEVIN. If you could summarize it.

Mr. ROBERT KEARNS. Our protest was on two bases:

No. 1, that we were perhaps dealing with people who could not be judged to have reasonableness and integrity as defined in the DAR.

Second, we protested the fact that our price had been perhaps unwittingly, but nonetheless, given to competition.

Senator LEVIN. What was the opinion on the second point?

Mr. ROBERT KEARNS. It was thrown out as being spurious. It was not something that they could act upon after award of the contract.

Senator LEVIN. It was not timely or because they did not think there was merit to it?

Mr. ROBERT KEARNS. They did not think there was merit.

Senator LEVIN. That you could prove it was disclosed?

Mr. ROBERT KEARNS. Right.

Senator LEVIN. Was it your understanding that after that April 1982 bid process that there were going to be negotiations entertained?

Mr. ROBERT KEARNS. There were a couple of best and final offer requests made of us and they were also made of the other two parties.

Senator LEVIN. Did you know those bids were going to be used as a basis to negotiate?

Mr. ROBERT KEARNS. No, sir.

Senator LEVIN. Was that the ground rule?

Mr. VINCENT KEARNS. From what we understand, it was highly unusual. This fact was passed along to us by members of the air staff in the Pentagon.

Senator LEVIN. Does the Air Force acknowledge the fact they did seek to negotiate after the bids were solicited?

Mr. ROBERT KEARNS. They have acknowledged to us that this should not have happened.

Senator LEVIN. I want to thank all of these gentlemen for coming forward, Mr. Chairman. It obviously takes some courage, particularly in the private sector, because there is always that fear up there that the Air Force might not look kindly on their actions.

I am sure everybody on the committee feels very kindly toward you, your willingness to come forward.

We will do everything we can to make sure that you are fairly treated because that is all you want in any further additional competition that you might enter. But the kind of graphic displays that you put up here I think are tremendous support for those of us who have been fighting this battle to try to stimulate competition in procurement in the Pentagon and we are very grateful to you.

Senator THURMOND [presiding]. Anything further, Senator Levin?

Senator LEVIN. No.

Senator THURMOND. Our next witness is Mr. Bruce Hahn.

Mr. Hahn?

STATEMENT OF BRUCE HAHN, GOVERNMENT AFFAIRS MANAGER, NATIONAL TOOLING AND MACHINING ASSOCIATION

Mr. HAHN. My name is Bruce Hahn, manager of Government Affairs for the National Tooling and Machining Association.

Our industry represents 14,000 small companies in the tool, die, and precision machining industry. Our industry is the keystone of all manufacturing, serving virtually every other manufacturing industry, including those supplying the Department of Defense.

The parts they produce range from the simplest to the most complex including such critical jet engine parts as turbine blades and parts produced by B. H. Aircraft.

Most of our members provide their services as subcontractors, bidding under open competition to provide original as well as spare parts for the Department of Defense.

We are also testifying on behalf of the 78 member associations of the Small Business Legislative Council. These members represent nearly 4.5 million small business units covering almost the full range of SIC classifications, as well as a large number of nonaffiliated business associations. In all, nearly 150 associations whose members are predominantly small business share our concern about DOD procurement practices.

THE SCOPE OF THE PROBLEM IS ENORMOUS

The Department of Defense buys over 13 million dollars' worth of spare parts annually. Less than 10 percent of the 3.9 million parts are procured through open competition.

Study after study demonstrated that leadtimes are reduced and costs cut nearly in half when procurements are switched from a sole source to a competitive basis.

By application of the percentages, it is apparent that \$5 to \$6 billion could be saved each year by switching those procurements from sole source to open competition. From this, you would have to subtract some amount for the manpower and systems required to implement such a change, but it would seem obvious that the net savings could be as much as \$4 to \$5 billion each year.

CAUSES OF THE PROBLEM—LACK OF TECHNICAL DATA NEEDED FOR PROCUREMENT

There is not one, but several problems with our procurement system. Members and staff of our association recently visited Tinker Air Force Base at the invitation of Air Force Secretary Verne Orr to review the situation.

Of 35,730 items procured on a sole-source basis, 12,773 of those items, or 36 percent were procured on sole-source basis because the Air Logistics Center either had no data or incomplete data.

In some cases, the data had been lost, while in others, it was simply illegible. Worse than that, in still other cases, the Air Force was unable to determine whether the data was or was not proprietary because the original contract for the system, which sets out data rights, had either been lost or destroyed.

Of those 35,730 items, 10,491, or 29 percent, were sole source because the item was allegedly proprietary. The remaining 35 percent were sole sourced for a variety of different reasons. Obviously, these problems would have to be addressed if more competition is to be obtained.

DOD'S USE OF PREQUALIFICATION AS A QUALITY-ASSURANCE TECHNIQUE

Now, let me turn to a different aspect of the problem. That aspect is quality control. In generally accepted practice, quality control is a process involving both dimensional and material inspection. It involves management controls and regular, predetermined instrument calibration.

In military procurement, the majority of the quality control function is determined by military specifications, or mil specs.

There are also specifications for sample sizes and techniques of random selection of sample parts. In most cases, our members, even when acting as subcontractors, perform this function and are already certified to the most stringent mil specs. Many others could achieve certification fairly easily with their existing quality programs.

In some of the cases, independent testing companies are employed to monitor vendors and in other cases a prime contractor may undertake the testing function.

Another aspect of quality control lies in the engineering process. The dimensions typically become more precisely defined, the material content becomes more precisely defined, and the percentage of parts tested will increase to assure higher levels of performance to design.

If necessary, testing 100 percent of the parts should be undertaken. The insistence on the highest levels of quality control by the Department of Defense is fully supported by our association and occurs primarily in the military specifications as well as in the original engineering process.

The problem lies not with these standards, but with other Defense regulations which have little, if anything, to do with quality. We are referring to the defense acquisition regulation including supplement No. 6, which was issued the same week that Secretary Weinberger issued his 10-point program on improving spare parts procurement.

This and other DOD regulations are not published in proposed form in the Federal Register and are not widely circulated for comment in draft form. These regulations have frustrated congressionally mandated requirements to use open competition as a preferred means of procurement.

Congress stipulated that the Small Business Administration would have the responsibility to make final determination of a company's ability to perform a contract if it would be awarded that particular contract except for a contracting officer's negative capability determination.

The will of Congress was thwarted by the development and assignment of Acquisition Method Codes that restrict the award of contracts for spare parts to sources that have prequalified.

One of the assumptions underlying the AMC's is that procurement should be restricted to prequalified sources on the grounds that it is necessary to assure the reliability of a part.

The DAR supplement reverses the requirement that noncompetitive procurements be justified. Instead, it requires that competitive procurements be justified.

It also deprives small businesses of their statutory right to have the Small Business Administration make the final determination of their capability to perform under the certificate of competency program.

Small businesses were first given this right during World War II, not as a handout, but because the repeated refusal of the War Department to contract with them was resulting in increased prices and lead-times which were hurting the war effort.

This is the same situation we have in spare parts procurement today. DOD's position is that if a bidder or product has not been prequalified, then it is obviously not qualified to make the part and is, thus, not eligible for a certificate of competency review.

By strictly limiting the number of companies eligible for certificate of competency review, DOD is effectively able to limit competition. The Small Business Administration, badly understaffed in this area, has had neither the resources nor the resolve to challenge this practice.

The services have maintained that their product and bidder prequalification systems are a means to assure that they have reliable bidders who will turn out quality products. We strongly disagree.

We believe that quality assurance lies in the techniques employed in the military specifications standards and engineering practices and

not in prequalification. How does this alleged quality assurance process work?

The procuring agency asks the original equipment manufacturer whether or not other firms should be allowed to compete against them on an open basis or should firms be required to prequalify because unique manufacturing practices are needed.

Not surprisingly, the OEM's generally recommend against competition and DOD generally follows such recommendations. Neither potential competitors nor independent engineering sources are consulted.

DOD claims that it has done away with contractor recommended codes in its new DAR Supplement on Spare Parts. However, it has left the procedure intact and merely changed the name from "Contractor Recommended Codes" to "Contractor Technical Information Codes."

DOD regulations reverse the requirement that sole-source procurements be justified and permit sole-source procurements where bureaucrats determine them to be less costly.

DAR Supplement No. 6, in fact, reverses the statutory preference for competitive procurements by providing a series of 65 hurdles through which a procurement must pass before it can be competitively purchased.

DAR Supplement No. 6 would permit noncompetitive procurements where competitive procedures would be likely to result in additional costs to the Government.

This appears to be illegal in light of GAO case law holding that such determination is to be made by the crucible of competition.

Studies have repeatedly shown that competition almost always results in substantial savings. Although there may be isolated exceptions to this rule, civil servants, no matter how well meaning, are ill-equipped to make this determination.

For these and other reasons, we believe that DOD support of DAR Supplement No. 6 as a document which would improve competition or which would improve quality assurance is completely without merit. Just as its predecessor regulation dating back to 1963, it contains only barriers to competition that have little, if any, relationship to the true process of quality assurance.

DEFENSE BUREAUCRATS IMPERVIOUS TO CHANGE

Another crucial aspect in solving the problem is the identification of the individuals responsible for our badly flawed and anticompetitive procurement system. We do not believe that it is the Congress of the United States which has on several occasions passed legislation designed to encourage competition, only to be thwarted by the secretive DOD rulemaking process.

We do not believe that the blame can be placed on DOD's prime contractors or subcontractors, be they large or small companies. These companies do not write the regulations.

As Senator Levin pointed out, the goal of any company, be it large or small, be it a contractor or a subcontractor, is to make a profit.

Earlier witnesses from Pratt & Whitney pointed out the prices are negotiated between the two parties. They do follow guidelines for markup and they do subcontract competitively in a responsible manner.

How then can you explain the discrepancies between prices?

Current regulations simply provide no incentive to control overhead or other costs and no incentive for any company not to charge a high price. Given the knowledge that there will not be competition, you may question the morality of some of the markups and prices, but in all fairness, you must recognize that they are not illegal, but are the result of a procurement system which provides overwhelming and almost irresistible temptations for such actions.

Nor is it really fair to blame the senior appointed executives in this administration or for that matter any previous administration. We believe in their sincerity and that they have made serious attempts to address the problem.

Secretary Weinberger has already made two pronouncements on the spare parts problem.

The first, with all due respect, contained lofty goals and no real substance, while the most recent, to his credit, correctly identified and substantively addressed a number of problems of spare parts procurements.

I might add that, for the most part, you cannot blame procuring officers. The procuring agencies are badly understaffed and their hands are tied by policy decisions made in Washington.

Indeed, we were impressed by the obvious frustration many of them feel during our recent visit to Tinker Air Force Base. Despite directives from the Secretary of the Air Force to increase competitive procurement from 20 percent to 40 percent over the next several years, they readily admit that under the current framework, it will be impossible to procure more than the 20 percent they are procuring competitively right now.

If none of the aforementioned people bear the responsibility for our present procurement system, then who is to blame?

In our opinion, the sources of the problem are the nameless and faceless mid-level procurement executives who labor in the bowels of the Pentagon.

Procurement regulations are extremely complex and these GS-13's, 14's, 15's, and 16's are the people whom the Secretary of Defense and the secretaries of the various service branches must ultimately rely on to put together our procurement system.

It is these people whom we can thank for a system under which only 10 percent of \$13 billion in annual purchases are procured competitively, for a system which has no systematic means of maintaining data or rights to data, and for a system which continues to thwart through the regulatory process the intent of Congress.

SOLUTIONS—FACTORS TO BE CONSIDERED

The solution to these problems must take a number of additional factors into consideration. Among those factors are the costs of a new system and issues such as reliability, traceability, configuration control, and product liability.

All of these must be measured against, and the costs subtracted from, the annual gross savings of \$5 to \$6 billion.

COSTS OF COMPETITION VERSUS POTENTIAL FOR SAVINGS

It has been suggested that the elimination of proprietary rights and/or sole-source contracts will result in higher prices of original systems. We would not only agree, but suggest that it would result in the Government paying the real price of original systems.

Right now, the cost of a total system is largely undeterminable. Only a downpayment is made when the original system is purchased.

Under current procurement practices, there is also an unspecified and uncontrollable additional cost resulting from sole-source procurements of spare parts. This must make the selection from two or more competing original equipment manufacturers very difficult.

The system that appears most cost effective initially may easily turn out to be the least cost effective because twice the number of parts have to be purchased on a sole-source basis.

If you could somehow get all or most of your costs on the front end, the initial costs would probably be higher. However, it would certainly be an improvement in accounting practices for the Government to be able to compare the true cost of one system to another system.

We believe that the total system cost, that is the cost of the system plus the spare parts required to maintain it over its lifetime, would go down.

VALUE ADDED BY ORIGINAL EQUIPMENT MANUFACTURERS

There is also the legitimate question of value added by prime contractors under the present system. The legitimate issue should be what is the fair value of those functions and its relationship to the multi-billion dollar potential annual savings.

A prime contractor, for example, may provide a service of forecasting and preordering. This is, no doubt, valuable in some cases, but should be discounted significantly because leadtimes as well as price are normally cut in half when procurements are switched from sole source to open competition.

Configuration control is often mentioned as a service. In the early stages of a system's development, designs fluctuate frequently and, given the present deficiencies in the DOD data storage and retrieval system, this is a valuable service.

However, the Government is already paying for configuration control as it pays for the development of a system. What it lacks is an accurate and reliable data base to keep track of configuration changes on a timely basis. With such a data base, it could maintain accurate records of rapidly changing configurations and could reap considerable savings resulting from the capability to purchase those parts competitively.

Another service provided by original equipment manufacturers is purchasing administration. OEM's do a good job of covering for understaffed procurement officers. They have no difficulty identifying qualified small business vendors and obtaining competitive bids.

As previously mentioned, original equipment manufacturers sometimes, but not always, offer supplier and process qualification. While much of the quality assurance is undertaken by subcontractors adher-

ing to military specifications, that function is sometimes undertaken by private laboratories, many of which can provide metallurgical testing and lab controls.

In some cases, the original equipment manufacturer may perform the quality assurance function as well. The fact that DOD has abdicated responsibility for these functions does not mean they are not charged for the service, nor does it mean that the same services cannot be obtained elsewhere for the same amount or less.

RELIABILITY

Another question is one of reliability. Reliability in turn is a function both of engineering design and the application of quality assurance procedures as required by military and engineering specifications.

Parts made to the same specifications and which successfully pass the same quality assurance procedures will be equally reliable. The size of the company producing the actual part is irrelevant.

Another question is warranties. Right now vendors at the current time are legally responsible for latent defects even after delivery. This applies to original equipment manufacturers or their suppliers. The entire system can only be warranted by an original equipment manufacturer since they have the responsibility for the engineering and design of that system.

Catastrophic loss is another question. Right now the Government has tended to assume the major responsibility for catastrophic loss.

Our experience has been that for our own members' product liability costs are so high and would increase so much more, not only to our members, but to large companies, that probably the most economical method would be to continue with that process.

The crux of the question is whether the value added to the spare parts procurement function by original-equipment manufacturers exceeds the potential multibillion dollars annual savings and, if not, whether legislation could be enacted that would achieve that objective.

Our association, and over 150 other associations in the small business community, conclude that the excess in prices paid in sole-source procurement nowhere nears the actual value added and that there is also a legislative means of achieving competition while producing net savings of billions of dollars each year.

We support the legislative approach offered in S. 1730. Rather than containing set-asides for small business or any other segment of the population, this solution seeks to remove barriers to competition and is supported by 24 cosponsors from both sides of the aisle.

It would restore the certificate of competency process and disallow the use of qualified bidders and products lists to preclude small businesses from competing for Federal contracts or subcontracts.

It would encourage the breakdown of procurement into smaller parts, thus facilitating more competition.

It would require the posting of bids describing any contract to be let by any Federal agency.

It would make clear the right of small business to have access to Government-owned nonproprietary, nonclassified technical data.

It would require DOD to purchase all designs with fair compensation to original equipment manufacturers or the use of any proprietary data on a limited basis for reprourement of that system only.

In summary, small business is virtually shut out of the DOD procurement process. As a result, instead of having thousands of capable small firms spread throughout the country, you have a much greater concentration of industrial base responsibilities among fewer companies which would be much more vulnerable in times of international conflict.

Small businesses are accustomed to competition. Study after study has demonstrated that they can cut costs in half and materially reduce leadtimes if only allowed to compete.

We don't want a handout. We don't want set-asides. All we want is a fair chance to compete and an opportunity to help the members of this committee reduce the costs of DOD procurement and expand and strengthen our industrial base.

Thank you very much.

[The prepared statement of Mr. Hahn follows:]

PREPARED STATEMENT BY BRUCE HAHN, GOVERNMENT AFFAIRS MANAGER,
THE NATIONAL TOOLING & MACHINING ASSOCIATION

Mr. Chairman and Members of the Committee: My name is Bruce Hahn. I am Government Affairs Manager of the National Tooling & Machining Association. Our industry represents 14,000 small companies in the tool, die, and precision machining industry. These companies build special tools, dies, molds, die casting dies, jigs, fixtures, gages, special machines, and precision machined parts and components. They use a wide variety of equipment and processes, including most machine tools, from the simplest lathe to the most complex electrical-chemical milling and electron-beam welding equipment, and lasers. They commonly achieve tolerances to one ten-thousandth of an inch and regularly use computers as an aid in design, machining, and control of operations. Our industry is literally the keystone of all manufacturing, serving virtually every other manufacturing industry, including those supplying the Department of Defense. The parts they produce range from the simplest to the most complex, including such critical jet engine parts as turbine blades. Most of them provide their services as subcontractors, bidding under open competition to provide original as well as spare parts for the Department of Defense.

We are also testifying on behalf of the 78 member associations of the Small Business Legislative Council. These members represent nearly 4.5 million small business units covering almost the full range of SIC classifications, as well as a large number of non-affiliated business associations. In all, nearly 150 associations whose members are predominantly small business share our concern about DOD procurement practices.

The scope of the problem is enormous. The Department of Defense buys over \$13 billion worth of spare parts annually. Less than 10 percent of the 3.9 million parts are procured through open competition. Study after study demonstrated that lead times are reduced and costs cut nearly in half when procurements are switched from a sole source to a competitive basis. By application of the percentages, it is apparent that \$5 to \$6 billion could be saved each year by switching those procurements from sole source to open competition. From this, you would have to subtract some amount for the manpower and systems required to implement such a change, but it would seem obvious that the net savings could be as much as \$4 to \$5 billion each year.

I. CAUSES OF THE PROBLEM

A. Lack of technical data needed for procurement

There is not one, but several problems with our procurement system. Members and staff of our Association recently visited Tinker Air Force Base at the invitation of Air Force Secretary Verne Orr to review the situation. Of 35,730 items procured on a sole source basis, 12,773 of those items, or 36 percent, were procured on a sole source basis because the Air Logistics Center either had no data or incomplete data. In some cases, the data had been lost, while in others, it was simply illegible. Worse than that, in still other cases, the Air Force was unable to determine whether the data was or was not proprietary because the

original contract for the system, which sets out data rights, had either been lost or destroyed.

Of those 35,730 items, 10,491, or 29 percent, were sole source because the item was allegedly proprietary. The remaining 35 percent were sole sourced for a variety of different reasons. Obviously, these problems would have to be addressed if more competition is to be obtained.

B. DOD's use of prequalification as a quality assurance technique

Now let me turn to a different aspect of the problem. That aspect is quality control. In generally accepted practice, quality control is a process involving both dimensional and material inspection. It involves management controls and regular pre-determined instrument calibration. In military procurement, the majority of the quality control function is determined by military specifications, or MIL SPECS. There are also specifications for sample sizes and techniques of random selection of sample parts. In most cases, our members, even when acting as sub-contractors, perform this function and are already certified to the most stringent MIL SPECS. Many others could achieve certification fairly easily with their existing quality programs. In some of the cases, independent testing companies are employed to monitor vendors and in other cases a prime contractor may undertake the testing function. Another aspect of quality control lies in the engineering process. The dimensions typically become more precisely defined, the material content becomes more precisely defined, and the percentage of parts tested will increase to assure higher levels of performance to design. If necessary, testing 100 percent of the parts should be undertaken. The insistence on the highest levels of quality control by the Department of Defense is fully supported by our Association and occurs primarily in the military specifications as well as in the original engineering process.

The problem lies not with these standards, but with other Defense regulations which have little, if anything, to do with quality. We are referring to the Defense Acquisition Regulation including Supplement No. 6, which was issued the same week that Secretary Weinberger issued his 10-point program on improving spare parts procurement. This and other DOD regulations are not published in proposed form in the Federal Register and are not widely circulated for comment in draft form. These regulations have frustrated Congressionally mandated requirements to use open competition as a preferred means of procurement. Congress stipulated that the Small Business Administration would have the responsibility to make final determination of a company's ability to perform a contract if it would be awarded that particular contract except for a contracting officer's negative capability determination. The will of Congress was thwarted by the development and assignment of Acquisition Method Codes that restrict the award of contracts for spare parts to sources that have prequalified. One of the assumptions underlying the AMC's is that procurement should be restricted to prequalified sources on the grounds that it is necessary to assure the reliability of a part. The DAR supplement reverses the requirement that non-competitive procurements be justified. Instead, it requires that competitive procurements be justified. It also deprives small businesses of their statutory right to have the Small Business Administration make the final determination of their capability to perform under the Certificate of Competency Program. Small businesses were first given this right during World War II, not as a handout, but because the repeated refusal of the War Department to contract with them was resulting in increased prices and lead times which were hurting the war effort. This is the same situation we have in spare parts procurement today.

DOD's position is that if a bidder or product has not been prequalified, then it is obviously not qualified to make the part and is, thus, not eligible for a Certificate of Competency review. By strictly limiting the number of companies eligible for Certificate of Competency review, DOD is effectively able to limit competition. The Small Business Administration, badly understaffed in this area, has had neither the resources nor the resolve to challenge this practice. The services have maintained that their product and bidder prequalification systems are a means to assure that they have reliable bidders who will turn out quality products. We strongly disagree. We believe that quality assurance lies in the techniques employed in the military specifications standards and engineering practices and not in prequalification. How does this alleged "quality assurance" process work? The procuring agency asks the original equipment manufacturer whether or not other firms should be allowed to compete against them on an open basis or should firms be required to prequalify because "unique manufacturing practices" are needed. Not surprisingly, the OEM's generally

recommend against competition and DOD generally follows such recommendations. Neither potential competitors nor independent engineering sources are consulted. DOD claims that it has done away with contractor recommended codes in its new DAR Supplement on Spare Parts. However, it has left the procedure intact and merely changed the name from "Contractor Recommended Codes" to "Contractor Technical Information Codes."

C. DOD regulations reverse the requirement that sole-source procurements be justified and permit sole-source procurements where bureaucrats determine them to be less costly

DAR Supplement No. 6, in fact, reverses the statutory preference for competitive procurements by providing a series of 65 hurdles through which a procurement must pass before it can be competitively purchased. DAR Supplement No. 6 would permit non-competitive procurements where "competitive procedures would be likely to result in additional costs to the government." This appears to be illegal in light of GAO case law holding that such determination is to be made by "the crucible of competition." Studies have repeatedly shown that competition almost always results in substantial savings. Although there may be isolated exceptions to this rule, civil servants, no matter how well meaning, are ill equipped to make this determination. For these and other reasons, we believe that DOD support of DAR Supplement No. 6 as a document which would improve competition or which would improve quality assurance is completely without merit. Just as its predecessor regulation dating back to 1963, it contains only barriers to competition that have little if any relationship to the true process of quality assurance.

D. Defense bureaucrats impervious to change

Another crucial aspect in solving the problem is the identification of the individuals responsible for our badly flawed and anti-competitive procurement system. We do not believe that it is the Congress of the United States which has on several occasions passed legislation designed to encourage competition, only to be thwarted by the secretive DOD rulemaking process. We do not believe that the blame can be placed on DOD's prime contractors or subcontractors, be they large or small companies. These companies do not write the regulations. The goal of any company, be it large or small, be it a contractor or a subcontractor, is to make a profit. Current regulations simply provide no incentive to control overhead or other costs and no incentive for any company not to charge a high price. Given the knowledge that there will not be competition, you may question the morality of some of the markups and prices, but in all fairness, you must recognize that they are not illegal, but are the result of a procurement system which provides overwhelming and almost irresistible temptations for such actions.

Nor is it really fair to blame the senior appointed executives in this administration or for that matter any previous administration. We believe in their sincerity and that they have made serious attempts to address the problem. Secretary Weinberger has already made two pronouncements on the spare parts problem. The first, with all due respect, contained lofty goals and no real substance, while the most recent, to his credit, correctly identified and substantively addressed a number of problems of spare parts procurements. I might add that, for the most part, you cannot blame procuring officers. The procuring agencies are badly understaffed and their hands are tied by policy decisions made in Washington. Indeed, we were impressed by the obvious frustration many of them feel during our recent visit to Tinker Air Force Base. Despite directives from the Secretary of the Air Force to increase competitive procurement from 20 percent to 40 percent over the next several years, they readily admit that under the current framework, it will be impossible to procure more than the 20 percent they are procuring competitively right now.

If none of the aforementioned people bear the responsibility for our present procurement system, then who is to blame? In our opinion, the source of the problem are the nameless and faceless mid-level procurement executives who labor in the bowels of the Pentagon. Procurement regulations are extremely complex and these GS 13's, 14's, 15's, and 16's are the people whom the Secretary of Defense and the Secretaries of the various service branches must ultimately rely on to put together our procurement system. It is these people whom we can thank for a system under which only 10 percent of \$13 billion in annual purchases are procured competitively, for a system which has no systematic means of maintaining data or rights to data, and for a system which continues to thwart through the regulatory process the intent of Congress.

II. SOLUTIONS

A. Factors to be considered

The solution to these problems must take a number of additional factors into consideration. Among those factors are the costs of a new system and issues such as reliability, traceability, configuration control, and product liability. All of these must be measured against, and the costs subtracted from, the annual gross savings of \$5 to \$6 billion.

1. Costs of competition versus potential for savings

It has been suggested that the elimination of proprietary rights and/or sole-source contracts will result in higher prices of original systems. We would not only agree, but suggest that it would result in the government paying the real price of original systems. Right now, the cost of a total system is largely undeterminable. Only a downpayment is made when the original system is purchased. Under current procurement practices, there is also an unspecified and uncontrollable additional cost resulting from sole-source procurements of spare parts. This must make the selection from two or more competing original equipment manufacturers very difficult. The system that appears most cost-effective initially may easily turn out to be the least cost-effective because twice the number of parts have to be purchased on a sole-source basis. If you could somehow get all or most of your costs on the front end, the initial costs would probably be higher. However, it would certainly be an improvement in accounting practices for the government to be able to compare the true cost of one system to another system. We believe that the total system cost, that is the cost of the system plus the spare parts required to maintain it over its lifetime, would go down.

2. Value added by original equipment manufacturers

There is also the legitimate question of value added by prime contractors under the present system. The legitimate issue should be what is the fair value of those functions and its relationship to the multi-billion dollar potential annual savings. A prime contractor, for example, may provide a service of forecasting and pre-ordering. That is, no doubt, valuable in some cases but should be discounted significantly because lead times as well as price are normally cut in half when procurements are switched from sole source to open competition. Configuration control is often mentioned as a service. In the early stages of a system's development, designs fluctuate frequently and, given the present deficiencies in the DOD data storage and retrieval system, this is a valuable service. However, the government is already paying for configuration control as it pays for the development of a system. What it lacks is an accurate and reliable data base to keep track of configuration changes on a timely basis. With such a data base, it could maintain accurate records of rapidly changing configurations and could reap considerable savings resulting from the capability to purchase those parts competitively.

Another service provided by original equipment manufacturers is purchasing administration. OEM's do a good job of covering for understaffed procurement officers. They have no difficulty identifying qualified small business vendors and obtaining competitive bids. As previously mentioned, original equipment manufacturers sometimes, but not always, offer supplier and process qualification. While much of the quality assurance is undertaken by subcontractors adhering to military specifications, that function is sometimes undertaken by private laboratories, many of which can provide metallurgical testing and lab controls. In some cases, the original equipment manufacturer may perform the quality assurance function as well. The fact that DOD has abdicated responsibility for these functions does not mean they are not charged for the service, nor does it mean that the same services cannot be obtained elsewhere for the same amount or less.

3. Reliability

Another question is one of reliability. Reliability in turn is a function both of engineering design and the application of quality assurance procedures as required by military and engineering specifications. Parts made to the same specifications and which successfully pass the same quality assurance procedures will be equally reliable. The size of the company producing the actual part is irrelevant. Traceability is currently achieved in several manners. In some cases, parts may be engraved with a coding which will identify the manufacturer of those parts. There are also methods to document how batches of parts not individually

identified are documented through distribution. There are also maintenance logs for every military aircraft which make it possible to trace parts back to the original manufacturer.

4. Prime contractor warranties

Another question is that of warranties. Under the standard inspection clause in all current contracts, vendors are legally responsible for latent defects, even after delivery. Our members, as well as OEM's, are currently expected to make good on latent defects regardless of whether they sell to the government directly or indirectly. Another side of that issue relates to performance warranties, based on so many hours of performance which have been used in cases where original systems do not perform or are not anticipated to perform as reliably as desired. It should be noted that such warranties have serious downside costs to the government. An original equipment manufacturer might object to warranting his parts against damage from parts produced by another manufacturer even though the OEM designed the parts and those parts must pass the same stringent quality assurance tests. OEM warranties result in sole source procurement of spare parts and high costs to the government. Indeed, it might be in the best interest of the original equipment manufacturer to produce a system that does not meet performance specifications knowing that to fail would be to assure excellent profit on spare parts. The solution is to avoid hourly warranties whenever possible. The complexity of advanced systems should be taken into account when setting realistic performance specifications and the government should insist on better design and performance as an alternative to hourly warranties. The current inspection clause will continue to cover specific parts irrespective of source. Under this clause, the original equipment manufacturer, as the system's designer and major source of quality assurance specifications, should continue to warrant the entire system, except for latent defects in specific parts supplied by other companies.

5. Liability for catastrophic loss

Finally, there remains the question of product liability. In practice, the government has assumed the responsibility for catastrophic risks in cost type contracts. Judging from the high rates our members already pay for product liability insurance, the total cost of insuring both OEM's as well as smaller contractors against catastrophic risks would be very high and would be reflected in procurement costs. The present policy of catastrophic risk assumption by the federal government for cost type contracts is clearly the most economical approach and should be extended to cover all contracts.

The crux of the question is whether the value added to the spare parts procurement function by original equipment manufacturers exceeds the potential multi-billion dollar annual savings and if not, whether legislation could be enacted which would achieve that objective. Our Association, and over 150 other associations in the small business community, conclude that the excess in prices paid in sole source procurements nowhere nears the actual value added and that there is a legislative means of achieving competition while producing net savings of billions of dollars each year. We are not suggesting that the establishment of an efficient procurement system will be inexpensive. Clearly it will not be. Many millions of dollars will have to be spent on quality assurance. While most subcontractors currently manage their own quality assurance program, which is reflected in their current pricing, others not currently providing their own quality assurance will have to begin providing it either themselves or through independent testing services. Either would likely cost less than the amount charged by an OEM because overhead would be less. A large amount would have to be spent on staffing, both for procurement personnel within the service branches and for personnel to manage an expanded Certificate of Competency program within the Small Business Administration. A data base would have to be developed within the Department of Defense which could provide accurate and timely data so that open competition could occur. In all, you are looking at expenditures of many millions of dollars, perhaps in the tens of millions or even hundreds of millions, in order to achieve gross savings of as much as \$5 to \$6 billion each year. Frankly, we believe that the return on the investment would nevertheless be excellent. DOD would have an improved ability to compare and evaluate original systems. The net savings would still be in the billions of dollars, even subtracting the added costs. More importantly, the integrity of our procurement system would be restored. No longer would members of this Committee have to

read, see, and hear countless newspaper, magazine, radio, and television accounts of the incredible waste existing in the procurement system. Individuals such as yourselves and groups such as ourselves who support a strong military would no longer have to fear the erosion of public support resulting from expose after expose that will continue forever until this issue is addressed.

Our coalition supports the legislative approach offered in S. 1730, the Small Business Competition in Contracting Act of 1983. Rather than containing set asides for small business or any other segment of the population, the legislation seeks to remove barriers to competition and is supported by 24 cosponsors from both sides of the aisle. It would restore the Certificate of Competency process and disallow the use of qualified bidders and products lists to preclude small businesses from competing for federal contracts or subcontracts. It would encourage the breakdown of procurements into smaller parts thus facilitating more competition. It would require the posting of bid sets describing any contract to be let by any federal agency. It would make clear the right of small businesses to have access to government-owned, non-proprietary, non-classified technical data. It would require the Department of Defense to purchase all designs and data required to manufacture major weapons systems. In the case of manufacturing data developed at private expense for commercial markets, the government would purchase only a license to use the data for the procurement of parts for that system. There would be no restriction on the OEM's commercial proprietary rights or right to sell or license the data rights to commercial customers or other government agencies, departments, or branches. This requirement could be waived with advance notification including the reason for the waiver request to this Committee. Each military department would be required to develop a system that accounted for rights and data for all technical data for major systems which it has purchased. Recent reports from the Defense Inspector General, the Naval Audit Service, and GAO have shown that many non-competitive procurements occur because DOD often does not receive data it has paid for or because the data is stamped proprietary.

The legislation would also put an end to the secretive procurement rulemaking process which is being carried on at this very moment by nameless bureaucrats in the bowels of the Pentagon with the knowledge that they are effectively shielded from public scrutiny. The legislation would make procurement rulemaking subject to the Regulatory Flexibility Act, which would require for the first time that those proposed rules be published in the Federal Register rather than distributing them to selected groups of their own choosing. The Regulatory Flexibility Act also requires that agencies publish an initial regulatory flexibility analysis of the impact of a proposed rule on small business in the notice of proposed rule-making and to include a final regulatory flexibility analysis in the Federal Register when the rule is finalized.

III. CONCLUSION

In summary, Mr. Chairman and Members of the committee, small business is virtually shut out of DOD's procurement process. As a result, instead of having thousands of capable and experienced small firms spread throughout the country as a part of our defense industrial base, you have a much greater concentration of industrial base responsibilities among fewer companies which would be much more vulnerable in times of international conflict.

Small businesses are accustomed to competition. Study after study has demonstrated that they can cut costs in half and materially reduce lead times if only allowed to compete. We do not want a handout. We do not want set-asides. All we want is a fair chance to compete and the opportunity to help the members of this Committee reduce the costs of DOD procurement and expand and strengthen our defense industrial base.

One final comment. I would like to make it very clear that we are not unhappy with the subcontracting that many primes offer to small business. What we are unhappy about is DOD's unwillingness and inability to use competition and our free enterprise system to save this country billions of dollars year after year after year.

Thank you very much. I'll be happy to answer any questions you may have.

PAUL J. SEIDMAN
ATTORNEY AT LAW
SUITE 1000
FEDERAL BAR BUILDING
1815 H STREET, N. W.
WASHINGTON, D. C. 20006
(202) 466-8730

ADMITTED IN
D.C., MD. & PA.

MARYLAND OFFICE
8300 BEECH TREE ROAD
BETHESDA, MARYLAND 20817
(301) 439-7994

August 3, 1983

HAND DELIVERED

General Counsel
United States General Accounting Office
441 G Street, N.W.
Washington, D.C. 20538

Dear Sir:

The National Tooling and Machining Association, through its counsel, hereby protests Defense Acquisition Regulation Supplement Number 6 entitled "DOD Replenishment Parts Breakout Program." Although dated 1 June, 1983, this regulation was issued by DOD last week. The net effect of this regulation and its predecessors is to preclude our small business membership from competing for spare parts contracts for major systems well within their capabilities. As a result, such contracts are generally awarded to the large original equipment manufacturer on a sole-source basis despite the fact that our members can generally provide the same item at materially lower prices and with shorter lead times.

The proposed DAR Supplement is illegal because:

- 1) it deprives our small business members of their statutory right for SBA to make the final determination as to their capability to perform under its certificate of competency program;
- 2) it reverses the statutory requirement that noncompetitive procurements be justified;
- 3) it permits noncompetitive procurements on grounds that DOD officials believe that noncompetitive procurements are less costly rather than letting such determination be made by the "crucible of competition" as required by law;
- 4) it nullifies the Public Law 95-507 mandate reserving under \$10,000 contracts for small business concerns where there are two or more small business sources; and

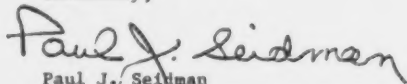
- 5) DOD has failed to comply with the procedures mandated by the Small Business Regulatory Flexibility Act in conducting this rule-making effort.

These points are discussed in detail in NTMA's September 23, 1982 comments on this regulation in proposed form, a copy of which is enclosed and incorporated as a part of this protest.

We would also like to note that despite the promises made by Principal DOD Undersecretary for Research and Engineering James Wade in April 19 hearings before the House Government Operations Committee, the procedure whereby original systems manufacturers can recommend codes assuring them sole source contracts has been retained. The name has only been changed from contractor recommended codes to contractor technical information codes. The DAR supplement is also more restrictive of competition than the proposal because it requires breakout efforts to cease if DOD officials determine that special tooling or test equipment is needed for manufacture.

We hereby request a ruling by the Comptroller General. Because of the importance to the taxpayers of the issues presented, we believe that a conference is desirable and hereby request that one be held.

Sincerely,



Paul J. Seidman
Counsel for the National Tooling
and Machining Association

Enclosure

cc: Caspar W. Weinberger
Secretary of Defense

PAUL J. SEIDMAN
ATTORNEY AT LAW
SUITE 1000
FEDERAL B&B BUILDING
1815 H STREET, N. W.
WASHINGTON, D. C. 20006
(202) 466-8730

ADMITTED IN
D.C., MD. & PA.

MARYLAND OFFICE
8300 BEECH TREE ROAD
BETHESDA, MARYLAND 20817
(301) 468-7994

August 12, 1983

General Counsel
United States General
Accounting Office
441 G Street, N.W.
Washington, D.C. 20538

Re: B-212574

Dear Sir:

This letter supplements the National Tooling and Machining Association's (NTMA) August 3, 1983 protest of Defense Acquisition Regulation Supplement Number 6, entitled "DOD Replenishment Parts Breakout Program."

The aforementioned protest is not of the type routinely handled by the General Accounting Office in that the protester is a trade association rather than a bidder and no particular procurement is protested. The purpose of this letter is to address the basis of our standing for bringing such a protest.

It is firmly established that a trade association has standing as an "interested party" under GAO bid protest regulations where its members are impacted by the actions protested. Black Business Association, B-187379, 76-2 CPD 524; Association of Soil and Foundation Engineers, B-199548, 80-2 CPD 196. NTMA's membership is deprived of billions of dollars of contracting opportunities as a result of DAR Supplement 6 and its predecessors. Under the procedures set forth in the DAR Supplement, NTMA member companies are unable to compete for spare parts contracts that they could generally perform at lower prices and with materially shorter lead times than those provided by the current sole source contractors. Under the DAR supplement the original systems manufacturer generally is asked by the procuring agency whether or not other sources should be required to prequalify in order to bid against them. Obviously, it is in such contractors interest to recommend barriers to competition that perpetuate their sole source status. Contractor recommendations are generally followed by the procuring agency and in many cases the same original systems manufacturer is tasked by the procuring agency with qualifying firms that want to compete against them.

NTMA is in a better position to bring this protest than its member companies. The so-called original equipment manufacturers are more assemblers than manufacturers of major weapons systems. Most of the actual manufacturing is done by machine shops such as NTMA member companies. Member companies fear bringing such a protest directly because of the fear of economic duress from the primes.

We recognize that as a general rule GAO dismisses protests where no particular agency procurement is being protested without consideration on the merits. See e.g., Columbus Jack Corporation, B-179526, 74-1 CPD 136. However, GAO has ruled on the legality of a regulation where it receives a protest related to its ongoing audit activity. John Bransby Productions, Ltd., 60 Comp. Gen. 104, 80-2 CPD 1432. GAO has conducted numerous audits of spare parts procurements since 1959 (see attached bibliography). We have also been informed that GAO is presently tasked by the House Armed Services Committee with conducting two audits on spare parts procurements.

Although we can and, if necessary, will protest individual solicitations we do not believe that this is the best posture to address the issues involved. In order to address the multifarious aspects of the replenishment parts regulation, we would need numerous cases. In addition, where individual cases are involved, they are often decided on unique circumstances applicable to particular procurements that are unrelated to the important issues we wish to address on behalf of the taxpayer and our industry. Furthermore, as previously noted, many of our members are already manufacturing parts as subcontractors to the original systems manufacturer. Protesting particular procurements could lead to our member companies being subjected to economic duress by the prime contractor of the part involved.

We therefore respectfully request that the Comptroller General consider our protest of August 3 on the merits.

Respectfully submitted,

Paul J. Spidman

Paul J. Spidman
Counsel for the National Tooling
and Machining Association

Enclosure

cc: Caspar W. Weinberger
Secretary of Defense

FILE: Spare Parts Regulation
(Procurement)

NATIONAL TOOLING & MACHINING ASSOCIATION

9300 LIVINGSTON ROAD, FT. WASHINGTON, MD 20744



BO1 248-6,900
TWA 710-828-9724

August 30, 1983

The Honorable Verne Orr
Secretary of the Air Force
Room 4E874
The Pentagon
Washington, DC 20330

Dear Secretary Orr:

Thank you again for inviting members of my staff to visit Tinker Air Force Base to discuss ways of breaking out spare parts. They found the visit to be quite informative and hope that the interchange was helpful to the Air Force also.

Based on the meeting, we have come up with the following findings and recommendations dealing with the problem of non-competitive spare parts procurements.

FINDINGS

1. Only 10% of the dollar value of spare parts and 20% of the number of spare parts procured at Tinker Air Force Base are procured competitively.
2. Despite directives from the Secretary of Defense to increase competition to 30% this year and 40% next year, the amounts procured competitively at Tinker will remain about the same. This is because of existing procurement regulations, lack of data, or the proprietary nature of data. You should be aware that this was the unanimous conclusion of procurement personnel with whom our people met. You will not get more competition unless you change the present regulations.
3. The present breakout program focuses on getting subcontractors and former subcontractors to bid against the primes. Subcontractors are afraid to do so because of the fear of having their subcontracts cut off. This is a reasonable fear as evidenced by threatening letters from prime contractors.
4. Thousands of other small businesses have the capability to make the parts, but are not permitted to do so under the present system.

5. Items which are non-competitive because no technical data is available are often the result of the government purchasing a system without the data in order to save money. The result is not savings but higher total costs and public outrage over the prices paid for spare parts.
6. Government should not have to pay more for original systems to obtain data. OEMs have to generate the data to manufacture the system anyway. The only additional cost is the cost of copying.
7. The responsibility for determining if the government receives data is with the Air Force Systems Command (AFSC). The Air Force Logistics Command (AFLC) must honor contractor proprietary legends unless something blatant occurs, such as a change from unrestricted to proprietary on a modification. There have been several instances of blatant false claims of confidentiality. There is no record of legal action by attorneys for the Air Force or the Justice Department despite the fact that such actions are violations of the False Claims Act.
8. Oklahoma City Air Logistics Center is often unable to determine rights in data needed for competitive procurement because the contracts setting forth the data rights have been destroyed. The primes have refused to provide the Air Force with copies. Legal means are available which could be used by the Air Force to procure the contracts from the primes.
9. The Air Force Competition Advocate program at Tinker has resulted in savings to the government of 16 times the amount expended for the program. However, Tinker Air Force personnel are afraid to request more slots for the program because they fear Congress will take the funds from another part of their budget.
10. In order to bid on restrictively coded items, firms presently have to prequalify on a part-by-part basis. In practice, this means either making a sample or providing evidence that they have made it as a subcontractor. This is costly, restrictive, and contrary to industry practice. Even those companies who make critical spare parts as subcontractors are not required to produce a sample prior to being considered as vendors.
11. It is almost impossible for a small business to compete for spare parts other than those coded "G" unless they have made the part for a prime before.

12. Eleven percent of the non-competitive procurements are non-competitive although technical data is available because OC/ALC engineers deem such parts as critical. These parts are coded "C." Twenty-four percent of non-competitive buys are made because no technical data is available. These parts are coded "D." Twelve percent of the non-competitive procurements are made because technical data is inadequate or incomplete. These parts are coded "H." Twenty-nine percent are made because the original equipment manufacturer alleges that the data involved is proprietary. These parts are coded "P." Twenty-four percent, or all the rest of the non-competitive procurements, are made for miscellaneous reasons such as the need for Class 1 A castings (Code "K"), the need for master tooling (Code "M"), or the need for special test equipment (Code "N").
13. Contractor-recommended codes permitting original equipment manufacturers to recommend the procurement method are no longer used at Tinker. Biased recommendations of the OEMs were found to be useless. However, they are still used at other Air Force bases.

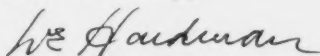
RECOMMENDATIONS

1. Do away with qualification procedures and let everyone bid. Qualification is a waste of both government and private resources because large sums are spent to qualify firms for items that may never be solicited and even if solicited, for which such firms may never be in line for an award. Furthermore, the qualification requirements discourage competition. A small business will not spend substantial sums to qualify to produce an item that may never be bought or, if bought, may not be awarded to them. Qualification also provides no assurance of quality. The fact that a hand-made prototype works does not mean that a mass produced version will. The best means of quality control is the application of accepted quality control techniques. These techniques, which are not presently utilized effectively, include sampling; measuring and testing; and rejecting any products not up to snuff.
2. If qualification procedures are retained, qualification should be done on a generic rather than a part-by-part basis. If a contractor is capable of making a particular part, he also should be capable of making related parts. Furthermore, as previously discussed, contractors are very much afraid of competing against their primes. Although a subcontractor of prime A would be afraid of competing against prime A for such part, he would not be afraid of making a similar part under a prime B system.

3. The government should always purchase all data, including level 3 technical data, as well as special tooling and test equipment for major weapons systems. This should be a clause in every procurement contract without exception. Total costs for the life of a system should be less in every conceivable case. OEMs should be required to supply the names of subcontractors by part number as part of the original contract. Proprietary data should be purchased, with reasonable compensation, on a limited basis for reprocurments for that system only.
4. The Air Force must become much more aggressive in asserting its rights in data. Prime contractors should be required to document rights in data. Spurious claims of business confidentiality should be prosecuted under the False Claims Act and the False Statements Act. If a contract under which data rights are determined has been destroyed, the Air Force should attempt to obtain a copy from the prime. If a prime refuses, the Air Force should bring suit to determine rights in data and obtain a copy of the contract from the prime using discovery procedures. The prime would then be required by law to provide such contract if it still exists. If the contract exists, the government can use it to determine rights in data. If the prime claims that it does not exist, they have no basis for their claim of business confidentiality.
5. Where contractor-recommended codes (under revised AFR 57-6 contractor technical information codes) are solicited from the prime, the Air Force should contract for independent engineering advice to verify the prime's recommendations. This is necessary because of the prime's interest in perpetuating its sole source status. NTMA would be willing to provide such a service.
6. Additional slots should be added to the Competition Advocate program.

We hope that you will find the above to be both informative and constructive. We look forward to working with you in the future toward achieving our common objective of eliminating costly, non-competitive procurements.

Most cordially,



William E. Hardman
Executive Vice President

WEH:dk

NATIONAL TOOLING & MACHINING ASSOCIATION

9300 LIVINGSTON ROAD, LT. WASHINGTON, MD 20744



301/248-6200
TWX: 710-828-9723

September 23, 1982

The Honorable William A. Long
Deputy Undersecretary of Defense
(Acquisition Management)
Washington, D.C. 20301

Dear Mr. Long:

These comments are submitted in response to DAR Case 79-39 which would add a supplement 6 to the Defense Acquisition Regulation entitled "Replenishment Parts Breakout Program."

The National Tooling and Machining Association (NTMA) represents the tool, die and precision machining industry. The industry is composed of 14,000 independent contracting manufacturing plants, almost all of which are small business concerns. These companies build special tools, dies, jigs, fixtures, molds, gauges, special machines (automation, robotics, and production lines) and precision machined parts or components. They use a wide variety of equipment and processes, including most machine tools from the simplest lathe to the most complex numerically-controlled machining center, electrical discharge machining, electrical-chemical milling, and electron-beam welding. They commonly achieve tolerances to one ten-thousandths of an inch and regularly use computers as an aid in design, machining, and control of operations.

I. Background

The proposed regulations would revise and incorporate in to DAR a directive entitled "High Dollar Spare Parts Breakout Program," March, 1969, commonly known as the Breakout Regulation/¹. We believe that this regulation is contrary to the Small Business Act, Armed Services Procurement Act and OFPP directives that are binding on DOD and that the Breakout regulation is therefore illegal. In addition, this rule-making effort does not comply with the requirements of the Small Business Regulatory Flexibility Act. The net effect of this directive (which was written by DOD engineers without public comment) is to preclude small businesses from competing for spare parts contracts for major systems well within their capabilities. As a result, such contracts are generally awarded to the large original systems manufacturer on a sole source basis.

A recent SBA study prepared at the request of the House Small Business Committee indicates that DOD wastes billions of dollars annually as a result of its

^{1/} The Army refers to the regulation as AR 715-22; Navy NAVMATINST 4200.33A, Marine Corps MCO P4200.13A, Air Force AFR 57-6 and the Defense Logistics Agency as DSAM 4105.2. All are identical.

noncompetitive spare parts purchases.² In reviewing SBA's findings, GAO concluded that they may have understated the potential for savings.³ Small companies are ready, willing and able to perform these contracts at a fraction of the prices presently paid by DOD; and with materially shorter lead times.

Given the present defense buildup and budgetary crisis, a review of DOD's costly mode of purchasing spare parts is particularly timely. NTMA welcomes the opportunity to set forth the problems as we see them and offer recommendations that would help achieve bipartisan economic and strategic goals.

II. Comments on the Proposal: In Brief

The DOD memorandum accompanying the proposal claims that "[t]he new supplement updates the program, removes obsolete text materials, and sharpens the procedures." However, the proposed regulation is substantially identical to the directive currently in effect. Just as in the existing directive, the key feature of the proposed regulation is a set of restrictive codings often assigned as a result of the recommendation of the original systems manufacturer. Reasons for restrictive coding include claims that the Government does not possess adequate data rights, that no adequate data package is available, or that unique manufacturing and testing capabilities are needed. The proposed regulation also sets forth a procedure for screening most items in order to remove the restrictive codings. We believe that the procedures are totally inadequate. Thus, both the proposed and present regulations encourage restrictive codes at the onset and then seek to rectify the matter by later revisions which may never take place.

In reality, the changes are of almost no value to small businesses desiring to compete for spare parts contracts for major systems. The proposal's weaknesses are the same as those in the present breakout regulation. More specifically:

1. A breakout regulation is unnecessary to assure that DOD purchases quality parts. It is redundant because DOD or SBA officials must determine that a contractor is capable of doing the job before an award is made.
2. The proposed DAR supplement and existing directive are illegal because they:
 - a. deprive small businesses of their statutory right to have SBA make the final determination as to their capability to perform under its certificate of competency program;
 - b. reverse the statutory requirement that noncompetitive procurements be justified;

²/ The study is published as part of the record in Small Business and the Federal Procurement System, Hearings Before the Subcommittee on General Oversight of the House Committee on Small Business, 97th Congress, 1st Session, 415, 422-436 (1981) (hereinafter cited as SBA Study)

³/ SBA's Breakout Efforts Increase Competitive Procurements at Air Logistics Centers, (GAO/PLRD-82-104), August 2, 1982. (hereinafter cited as GAO Report).

- c. permit noncompetitive procurements on grounds that DOD officials believe noncompetitive procurements are less costly rather than let such determination be made by the "crucible of competition" as required by law; and
 - d. nullify the Public Law 95-507 mandate reserving under \$10,000.00 contracts for small business concerns where there are two or more small business sources.
3. The proposal fails to distinguish between openly competitive procurements and procurements where competition is restricted. Once restricted competition is achieved, all further breakout efforts cease.
 4. Under the present system, only original systems manufacturers can recommend procurement codes. Interested small businesses or their associations should be permitted to participate in the process. The original systems manufacturers of course recommend against competition and DOD generally goes along. The proposal should be modified to mandate small business participation in the assignment of procurement method codes;
 5. No provision is made for small business access to data needed to compete for DOD spare parts contracts and licensed foreign military sales;
 6. The regulation would continue to encourage contractors to mark all data they supply to the Government as "proprietary," whether or not such a legend is justified, as many now do in order to receive sole source contracts. It should be modified to penalize spurious claims in data by original systems manufacturers;
 7. The proposal would continue to encourage original systems manufacturers to provide DOD with faulty data packages in order to receive sole source spare parts contracts on grounds that an adequate data package is not available;
 8. The redefined acquisition method suffix codes, which is used to determine if a part is competitively purchased, do nothing to further competition;
 9. The proposal would result in DOD continuing to waste billions annually as a result of noncompetitive spare parts procurements, diminished small business opportunities and continued erosion of the defense industrial base;

10. DOD has failed to comply with the Small Business Regulatory Flexibility Act in conducting this rulemaking effort.

These points will be addressed in detail below.

III. The Breakout Regulation is Unnecessary and Should Be Repealed.

Before addressing the merits of the DOD proposal, the obvious question is whether a breakout regulation is necessary. History has repeatedly shown that Government regulation, left unchecked, reduces both private and public sector productivity. It would therefore seem fair to ask whether the benefits, if any, resulting from the regulation justify its cost.

In order to justify a competitive procurement under the breakout regulation, DOD personnel are required to go through a maze similar to that designed for laboratory rats. The chart which appears as Exhibit II to the DOD proposal is reproduced on the next page. If at any juncture a wrong step is taken, the procurement remains noncompetitive. The rat-like maze in effect requires noncompetitive procurement unless through daring do contracting personnel can run the gauntlet and justify as an exception a competitive procurement. Such scheme would appear to be the exact opposite of the Armed Services Procurement Act which mandates competitive procurements unless a non-competitive procurement can be justified under a statutory exception.

The stated goal of the DOD proposal as well as the present directive is competitive procurements. Aside from the obvious legal questions, one might conclude that it would be less costly to achieve this goal by requiring contracting officers to justify noncompetitive procurements rather than by requiring them to successfully complete an obstacle course to justify competitive procurements.

As far as the benefits of the breakout regulation, its proponents claim that it is necessary to assure that the Government receives high quality parts. But is this really the case? Existing law requires that the contracting officials make a determination that a contractor is responsible (capable of performing) before an award can be made.⁴ If a small business contractor's responsibility is questioned by the contracting officer, such determination is made by the SBA.⁵ In view of this requirement, any further protection is unnecessary and merely results in noncompetitive procurements and an unnecessary expenditure of both DOD and contractor resources. Furthermore, such system does nothing to assure quality. Quality control is imposed by more vigorous specifications and inspections in cases where the part is critical. Inspections must be performed on the product to ensure quality control regardless of whether the supplier is small or large. Larger companies may have no better equipment, only more equipment and it is incorrect to assume that they are somehow better prepared to produce quality products.

The additional costs of this breakout regulation are obvious. Contractors are

⁴/ 10 U.S.C. § 2305(c); DAR § 1-902

⁵/ 15 U.S.C. § 637(b)(7)

required to spend tremendous unproductive time and expense to qualify as a source and DOD must maintain a large bureaucracy to police each turn in its maze. However, as will be discussed in detail below, the most significant cost is the additional billions of dollars DOD spends for spare parts annually as a result of noncompetitive sole source purchases. Another cost of DOD's sole source procurements is long lead times that have resulted in planes being cannibalized for parts to keep others flying and an inability to surge productions in time of crisis.⁶

In light of the above, NTMA submits that it would be in the interest of all concerned (with the possible exception of those few firms reaping the pecuniary benefits of sole source contracts) if DOD withdrew its present proposal and repealed the present breakout directive.

IV. The Proposed Regulation and Present DOD Breakout Directive are Illegal.

- A. The Proposal Deprives Small Businesses of their Statutory Right to have SBA Make the Final Determination of their Capability to Perform Under its Certificate of Competency Program.

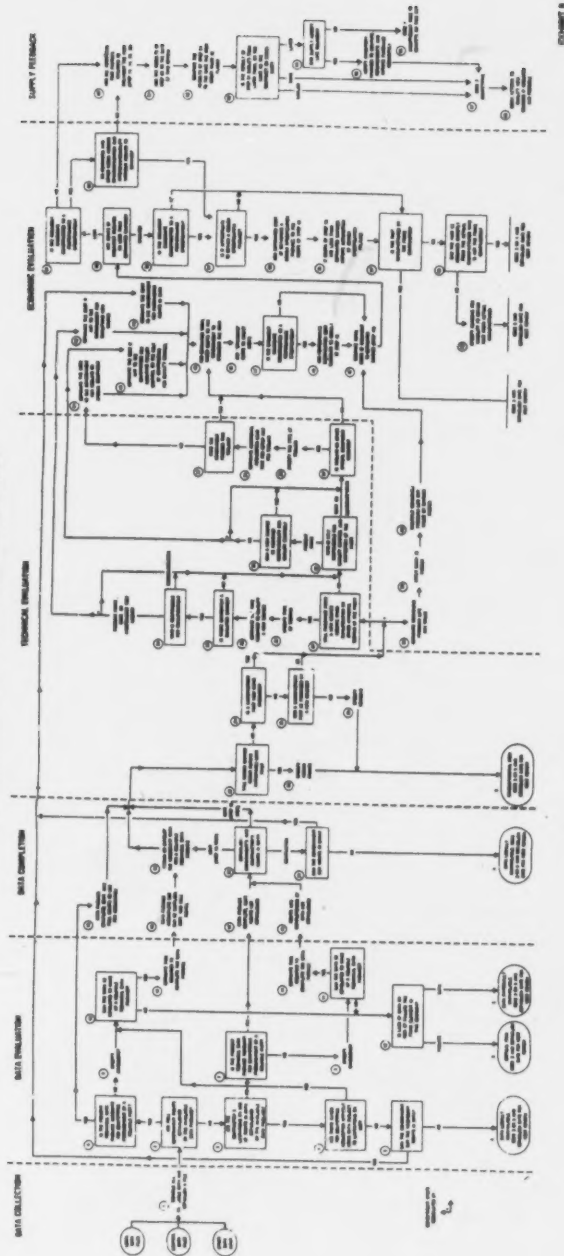
The title of the existing DOD directive is "High Dollar Spare Parts Breakout Program." The DAR supplement which DOD now proposes would be called "Replenishment Parts Breakout Program." One would think from the phrase "Breakout Program" in the documents that their intent was to promote, rather than restrict competition. However, the titles are a misnomer. They restrict, rather than encourage, competition. They embody an illegal system of bidder prequalification that deprives small businesses, such as NTMA member companies, of their statutory right to have SBA make the final determination as to their capability to perform a particular contract. As surprising as it may seem, the restrictive codings which are the basis of this prequalification system are often the result of recommendations from original systems manufacturers who are in an obvious conflict of interest situation because they would benefit from lucrative sole source contracts.

1. Bidder Prequalification as a Means to Screen Out Small Firms. The Certificate of Competency Program -- In General.

In order for a firm to be awarded a Government contract, a determination must be made that it is responsible. Responsibility is defined as the ability of a firm to perform a particular contract. As a general rule, the contracting officer has the authority to make the final determination as to a firm's responsibility. However, under the Small Business Act, small business concerns have the right to have SBA make the final determination as to their responsibility, if they would have been awarded a particular contract except for a contracting officer's negative responsibility

6/ Mossberg, Out of Action: Many Air Force Planes Often Can't Be Flown for Lack of Spare Parts, Wall Street Journal, June 1, 1981, p. 1.

REPLENISHMENT PARTS BREAKOUT PROGRAM FULL SCREENING DECISION PROCESS SUMMARY FLOW CHART



determination./7 This review is conducted under SBA's Certificate of Competency program.

The enactment of certificate of competency legislation was a result of the systematic exclusion of small business from defense contracts during World War II. Testimony in 1942 hearings before the Senate Banking and Currency Committee showed that contracting officers often refused to make awards to small business concerns on grounds that they were not responsible. They would subsequently discover that the same small business were performing the work as subcontractors to the large firms awarded the contract in question. the War Production Board also called for the enactment of legislation to correct the tendency of contracting officers to underestimate the capabilities of small business concerns and the resulting negative impact on the industrial base./8

2. The Use of Bidder Prequalification to Deprive Small Firms of the Right to Apply for a COC

The current fiasco in spare parts procurement results from an artifice used by DOD that deprives small business concerns of their right to have SBA make the final determination as to their responsibility. This is done by a redundant system of bidder prequalification set forth in the so-called Breakout Regulation. The concept is fairly simple. If a small business is precluded from bidding by a bidder prequalification system, the need to refer the question of their responsibility to SBA for Certificate of Competency proposes never arises. It is DOD's position that a small business is only entitled to a certificate of competency review if it would have been awarded a particular contract if it were not for the contracting officer's negative responsibility determination. If a small business is precluded from bidding, this stage of the procurement process is never reached.

The way this is done is by the assignment of procurement method codes (PMCs) that restrict the award of contracts for spare parts to sources that have prequalified. The proposal would substitute the term Acquisition Method Codes (AMCs), but is otherwise substantially identical. A similar system of bidder prequalification was used to violate the Small Business Act in Office of Federal Procurement Policy's Films Production Contracting System, 60 Comp. Gen. 104, B-198360, 80-2 CPD 419. More specifically, GAO held in that case that a determination that a small business was not qualified to participate in federal audiovisual contracts made under the Office of Federal Procurement Policy's Uniform System for purchasing film and videotape productions violated Small Business Act Provisions giving small firms the right to have SBA make the final determination as to their capability to perform.

One of the assumptions underlying the PMCs or AMCs is that procurements should be restricted to prequalified sources on the grounds that it is necessary to assure the reliability of a part. Other assumptions are that unique manufacturing

7/ 15 U.S.C. § 637(b)(7)

8/ Senate Hearings on S. 2250, 77th Congress, 2nd Session.

capabilities are needed, that adequate data to produce the part is not available or that there is a question as to whether or not the Government has the right to use the data necessary to produce the item in question.

B. The Breakout Regulation Reverses the Statutory Requirement of Competitive Procurements Unless a Noncompetitive Procurement Can Be Justified.

The Armed Services Procurement Act requires competitive procurements unless a noncompetitive procurement can be justified. More specifically, 10 U.S.C. § 2304 requires open competition in the form of formal advertising except where (1) formal advertising is not feasible and practicable, and (2) the circumstances fall within a statutory exception permitting negotiation. Contracting officials are required to issue written justifications called determinations and findings in order to negotiate under most exceptions.⁹

Even where the use of negotiation is permissible in lieu of formal advertising contracting officials are still required to maximize competition. More specifically, 10 U.S.C. § 2304(g) requires that "... proposals, including price, shall be solicited from the maximum number of qualified sources consistent with the nature and requirements of the supplies to be procured, and written or oral discussions shall be conducted with all responsible offerors who submit proposals within the competitive range, price and other factors considered." As a result, the Comptroller General has stated that it will not sanction noncompetitive awards absent "demonstrable proof" that only one source exists¹⁰ and that agencies must be able to justify any restrictions on competition as necessary to meet the Government's minimum needs.¹¹

Both the existing DOD Breakout Directive and DAR Proposal are premised on the basic assumption that spare parts procurements should be noncompetitive unless competitive procurements can be justified. NTMA submits that this reverses the legal requirement of competitive procurements unless a noncompetitive procurement can be justified and is, therefore, illegal.

C. The Requirement of an Economic Justification for Competitive Procurements Is Contrary to Law.

§ S6.303.5 of the proposed DAR supplement requires that an economic evaluation be made before a part is broken out for competitive procurement. This would require the procuring activity to "[c]ompare estimated costs to forecasted breakout savings. If costs exceed estimated savings, it will be uneconomical to compete the part "and future procurements will remain noncompetitive." §S6-303.5(e)

The requirement that competitive procurements be economically justified is illegal. For example, in Olivetti Corporation of America, B-187369, 77-1CPD ¶ 146,

⁹/ 10 U.S.C. §§ 2304, 2310

¹⁰/ B-153037, May 11, 1965

¹¹/ 49 Comp. Gen. 727 (1970)

the Comptroller General held that it was improper for the Civil Service Commission to procure typewriters on a sole source basis because it projected that no one could compete with one supplier's price. More specifically, GAO stated its rationale as follows at page 3:

Whatever the contracting officer's conclusion as to potential price competition, however, it may not be the grounds for sole source award of a contract. 41 Comp. Gen. 484, 490 (1962). The contracting officer may not speculate as to potential bidders' willingness to compete in the face of a particular firm's apparent competitive advantage. That willingness may only be tested in the crucible of competition. See, 16 Comp. Gen. 395, 398 (1943). Even where the contracting officer perceives little or no willingness in the market to supply competitive offers or bids, the administrative costs of preparing and issuing a solicitation are outweighed by the potential costs of losing bidders' confidence in the competitive system./12

In light of the above, we recommend that any requirement that competitive procurements be economically justified be deleted from the proposal. Even if the imposition of an economic justification for competitive procurements were legally permissible, the 25% projected savings from breakout that the proposal would require to be used is too conservative. A recent SBA study documented average savings of 38.5% when parts were broken out for competitive procurement/13 and a subsequent GAO report concluded that SBA may have understated the savings achieved./14

D. The Proposal Nullifies Public Law 95-507 Provisions Reserving Under \$10,000.00 Contracts for Small Business Concerns.

Section 221 of Public Law 95-507 adds a new section (15)(j) to the Small Business Act. Such section requires that contracts with an anticipated value of less than \$10,000.00 "be reserved exclusively for small business concerns unless the contracting officer is unable to obtain offers from two or more small business concerns."

The required procedure for under \$10,000.00 contracts is set forth in OFPP Policy Letter 80-6 which is binding on DOD. More specifically, OFPP Policy Letter 80-6 states in relevant part as follows:

- (a) Each small purchase procurement of supplies or services having an anticipated value of less than \$10,000.00 is automatically set-aside for small business concerns;
- (b) If the contracting officer determines that he can reasonably expect to obtain two or more offers from small business concerns that are competitive in terms of market price,

12/ See also Burton Meyers Co., B-190723, 78-1CPD ¶ 280, in which GAO held that a sole source procurement of auditing services could not be justified based on the procuring agency's conclusion that one accounting firm had a competitive advantage.

13/ SBA Study, supra, n. 2

14/ GAO Report, supra, n. 3

quality, and delivery, he shall proceed to make an award under the small purchase set-aside; in determining whether he can reasonably expect to obtain two or more such offers, the contracting officer should ascertain, by telephone or other informal means as appropriate, the availability of small business suppliers. (Emphasis added.)

AMSC "L" of the proposal would nullify the P.L. 95-507 mandate and in effect reserve under \$10,000.00 for large original systems manufacturers by exempting parts from breakout efforts where the annual buy value is below \$10,000.00. NTMA submits that proposed AMC "L" violates the Small Business Act provisions reserving under \$10,000.00 for small business concerns as does PMC "L" in the present directive which perpetuates noncompetitive procurements where "[T]he low dollar value of procurement makes it uneconomical to undertake to improve the procurement status of this item." NTMA also notes that P.L. 95-507 and the implementing OFPP directive require the contracting officer to affirmatively seek and be unable to find small business competition before large businesses are considered for under \$10,000.00 contracts. The capabilities of NTMA member companies are computerized and NTMA would be delighted to assist DOD in its statutory duty to locate small business sources for under \$10,000.00 contracts. We submit that P.L. 95-507 requires DOD officials to make such an inquiry before using other small business set asides for under \$10,000.00 contracts./15

V. The Regulation Should Distinguish Between Restricted and Full Competition and Require Breakout Efforts to Continue Until Full Competition is Achieved

One problem with the present proposal is that it contemplates no further breakout efforts once limited competition is achieved.

The restrictive codings are a combination of a numerical acquisition method code (AMCs) and a letter acquisition method suffix code (AMSCs). Of the five AMCs described in § S6-201, only two contemplate competitive procurements. These are AMC 1 "Denotes parts can be acquired competitively (See notes 1 and 2)" and AMC 2 "Denotes determination that the part can be acquired competitively for the first time (See notes 1 and 2)." However, Note 1 to -AMCs 1 and 2 provides that "[c]ompetitive sources may be restricted."

Furthermore, § S6-203 entitled improving part status requires "that all reasonable actions be taken to improve the acquisition status of parts not coded 1G, 2G, 1T or 2T." Although 1G and 2G are for unrestricted competition, 1T and 2T contemplate the use of qualified products lists to restrict competition.

NTMA suggests that additional AMCs be added to distinguish between restricted

15/ NTMA also supports the Uniform Procurement System provisions proposed by the Office of Federal Procurement Policy that would raise the dollar level of this P.L. 95-507 requirement to \$25,000. We also believe that it should be indexed for inflation.

and unrestricted competition and that breakout efforts be pursued until a part is openly competitive.

VI. Original Manufacturer Participation in Assignment of Codes.

Just as in earlier versions of the so-called breakout regulation, the proposal would provide for the participation of the original systems manufacturer in the assignment of AMCs. The original manufacturer provides a contractor-recommended code (CRC). DOD engineers in many cases lack both the inclination and background to question the CRCs. A large number of CRCs, therefore, have historically been adopted by DOD as AMCs. Of course, the entire procedure rests upon an obvious and serious conflict of interest.

Not surprisingly, there have been significant abuses in the assignment of CRCs. Many items have been restricted on various grounds such as that unique manufacturing capabilities are needed. However, many of those same parts could be manufactured at significant savings to the Government by small businesses. The tragedy is that a high percentage of the same items are presently produced by smaller companies on a subcontract basis and marked up, in some cases hundreds of percentage points, in the final price paid by the Government.

One positive aspect of the present proposal is providing for Small Business Administration procurement center representative participation in screening conferences. However, this does not go far enough. Although the results of SBA breakout procurements center representatives has been commendable, their staffing is presently not sufficient to do a thorough job. This problem was described as follows in a recent GAO Report:¹⁶

The SBA personnel at all locations involved in breakout activities told us that limited staff prevents them from reviewing many procurements with breakout potential. To verify this, we asked the PCR at the Ogden ALC to record all the procurements which he handled during one week. Four hundred and forty-four procurement requests were recorded for the week. The PCR identified 132 of these procurements for potential breakout, but could review only 17 percent (22 of the 132) for breakout. The PCR was firmly convinced that assigning additional staff to breakout efforts would result in a greater number of breakouts and a larger dollar saving.

Receiving only the recommendation of the original equipment manufacturer, who stands to benefit from the perpetuation of restrictive procurements, gives purchasing activities a slanted perspective. NTMA recommends that the proposal be amended to require the solicitation of recommendations from small business associations such as NTMA whenever the recommendations of the original equipment manufacturer are solicited. This will give the purchasing activity a more balanced perspective. We at NTMA believe we can help save billions of dollars in this area because of our

^{16/} Id. at p. 5

technical expertise and our computerized data base identifying the capabilities of our members.

VII. The Proposal Should Provide for Small Business Access to Technical Data

Parts have been broken out as a result of a small business demonstrating it could manufacture or supply an item after it had obtained and reviewed pertinent technical data. In order to be effective, such access and review must occur well before a solicitation is issued or an order placed under a basic ordering agreement because of necessary lead times required to prepare a responsible bid. Neither the present nor the proposed regulation provides a mode for potential competitors to have access to Government-owned technical data. NTMA recommends that the proposal be amended to provide for such access.

VIII. The Proposal Should Penalize Original Systems Manufacturers for Spurious Claims of Data Rights

Breakout efforts can be stopped cold by spurious claims that the necessary data is proprietary to the original aircraft manufacturer. The practice of stamping all data "proprietary" benefits the original manufacturer with sole source awards until the Government removes the spurious legend. As we have seen, the military departments are less than scrupulous in vindicating rights in data.

When baseless claims of confidentiality are made, rather than reward the claimant with a sole source contract, as is often now the case, the proposal should require DOD officials to refer the matter to the Department of Justice for prosecution under the False Claims Act, 18 U.S.C. § 287, or the False Statements Act, 18 U.S.C. § 1001. A less drastic remedy would be an amendment to the proposal requiring offenders to pay the cost (legal, administrative, etc.) of removing spurious data rights legends.

IX. DOD Should Require Original Equipment Manufacturers to Correct Faulty Data Packages.

Under the High Dollar Spare Parts Breakout Regulations, sole source procurements to the original systems manufacturer are often justified on the grounds that an adequate data package does not exist. This is true even where the original systems manufacturer was required to provide the Government with such a package. One would think that DOD contracting personnel would insist on the correction of defective data packages so that they could partake of the cost saving benefits of competition. Instead, they often take the easy way out and reward the original systems manufacturer for its less than satisfactory performance by awarding them spare parts contracts on a sole source basis.

NTMA recommends that DOD insist that the original manufacturers correct faulty data packages or pay to have them corrected rather than rewarding their shoddy work with sole source contracts for spare parts on grounds that an adequate data package does not exist. DOD would have this right under the standard inspection clause where a defect is "latent." DOD should include stronger warranty clauses for technical data when making future major systems acquisitions.

X. Redefined AMSCs Do Nothing to Further Competition.

Acquisition Method Suffix Codes (AMSCs) set forth in § S6-201(b) of the proposed DAR Supplement indicate the basis for assigning a noncompetitive Acquisition Method Code to a particular part. As previously noted, we consider these bases for assigning restrictive codes to deprive small businesses of their statutory right to have SBA make the final determination of their capability to perform a particular contract under its Certificate of Competency Program.

The AMSCs in the DOD proposal are substantially identical to those in the present directive. Some restrictive codes have been dropped as duplicates of remaining codes, but no net change occurs. For example, the subject matter of existing suffix code "Q" ("items requiring unique manufacturing processes or material" for which there are not adequate specifications) deleted in the proposal appears amply covered by AMSC "C" ("part requires engineering source approval by the design control activity in order to maintain the quality of the part"), "H" ("The Government does not have in its possession sufficient, accurate or legible data. Acquisition of this part must be limited to current source(s)."), "M" ("Master or coordinated testing is required to produce this part") or "N" ("This part requires special test and/or inspection facilities to determine and maintain ultra-precision quality for its function or system integrity.").

Because of the importance of AMSCs as justifications for restrictive procurements, each one will be addressed below.

1. "A'. The Government's Right to Use Data in its Possession is Questionable"

No restrictive code should be assigned until it is in fact determined that the Government does not have data rights. The assignment of restrictive codes because Government data rights are "questionable" will unnecessarily perpetuate costly noncompetitive procurements. NTMA also notes that even if the Government does not have data rights, it should consider the feasibility of using its eminent domain power to acquire the data and discuss compensation with the contractor after the fact.

2. "B'. Acquisition of this Part is Restricted to Source(s) Specified on 'Source Control,' 'Altered Item' or 'Selected Item' Drawings/Documents"

3. "C'. This Part Requires Engineering Source Approval by the

Design Control Activity . . ."

AMSCs "B" and "C" are legally questionable in that they could deprive small businesses of their statutory right to have SBA make the final determination as to their capability to perform. They also result in de facto debarments in violation of constitutional guarantees of due process of law.

4. "D'. The Data Needed to Acquire the Part from Additional Sources is Not Available Within the Government, It Cannot be Obtained, Nor is it Possible to Draft Adequate Specifications or Any Other Description of the Part for a Solicitation of Bids/Proposals from Additional Sources."

AMSC "D" should be amended to require reviewing officials to consider the feasibility of the Government's utilizing its eminent domain power to acquire necessary data and providing the owner of such data with "just compensation" after the fact.

5. "G'. This Part is Technically Suitable and Legally Clear for Unrestricted Competition and the Data Package is Complete."

"G" is the only AMSC permitting open competition. NTMA objects to the language "technically suitable and legally clear for unrestricted competition." The phrase "technically suitable" could be used to deprive small businesses of their statutory right to have SBA make the final determination as to their technical capability to perform. The requirement of a legal clearance for competition is contrary to the statutory requirement that other than fully competitive procurements be legally justified. There is no authority supporting the proposition that a competitive procurement must be justified.

NTMA further suggests that the language "the data package is complete" be deleted for, in some circumstances, it is possible to have a fully competitive procurement without a complete data package.

6. "H'. The Government Does Not have In Its Possession Sufficient Accurate or Legible Data . . ."

AMSC "H" would appear to just duplicate "D" and is therefore unnecessary. See our comments for "D."

7. "K'. This Part is Produced from Class 1A Castings (e.g., Class 1 of MIL-C-6021) and Similar Type Forgings. The Process of Developing and Proving the Acceptability of High-Integrity Castings and Forgings Requires Repetitive Performance by

a Controlled Source. Each Casting or Forging Must be Produced Along Identical Lines to Those Which Resulted in Initial Acceptability of the Part."

"K" deprives small businesses of their right to have SBA make the final determination as to their technical capability to perform and may result in de facto debarments without due process of law. Many small businesses have the capability to produce class 1A castings and similar type forgings. We would welcome the opportunity to save DOD money by using our computer to identify additional sources.

8. "L'. The Annual Buy Value of this Part Falls Below the Screening Threshold of \$10,000.00, But it Has Been Screened for Known Source(s). . ."

For the reasons discussed at pp. 7 to 8, *supra*, AMSC "L" violates Public Law 95-507 provisions reserving under \$10,000.00 contracts for small business concerns. The net effect is to reserve under \$10,000.00 contracts for large original systems manufacturers. The limitation of screening known sources is also contrary to P.L. 95-507 provisions requiring the contracting officer to affirmatively seek small business sources. NTMA submits that AMSC "L" must be rejected as contrary to the Small Business Act. NTMA offers its computer bank to help DOD meet its P.L. 95-507 obligation of identifying potential sources for under \$10,000.00 contracts.

9. "M'. Master or Coordinated Tooling is Required to Produce this Part . . ."
10. "N'. This Part Requires Special Test and/or Inspection Facilities to Determine and Maintain Ultra-Precision Quality for its Function or System Integrity . . . Other Sources in Industry do not Possess, Nor Would it be Economically Feasible for them to Acquire Such Facilities."

AMSC's "M" and "N" deprive small businesses of their statutory right to have SBA make the final determination as to their technical capability to perform under its Certificate of Competency Program and may result in their de facto debarment without due process of law.

In addition, NTMA member companies specialize in the manufacture of master or coordinated tooling. An "M" coding should not be permitted unless the tooling in question cannot be reproduced — a highly unlikely situation. Again, we would be willing to help DOD identify NTMA member companies capable of manufacturing the tooling in question.

As far as "N" is concerned, NTMA objects to DOD officials justifying a noncompetitive procurement on grounds that it is uneconomically feasible for new

sources to acquire special test and/or inspection facilities. As previously discussed at pp. 8 to 9, the new law requires that such determination be left to the marketplace.

11. "P". The Right to Use the Data Needed to Purchase this Part From Additional Sources are not Owned by the Government and Cannot be Purchased."

AMSC "P" is misleading. If the data is owned by a contractor, the Government can always purchase it by exercising its eminent domain authority and haggle about the price at a later date.

12. "R". The Data or the Rights to Use the Data Needed to Purchase this Part from Additional Sources are not Owned by the Government and It has been Determined that it is Uneconomical to Purchase Them."

"R" should be amended to require that the Government also determine that it is uneconomical to obtain the data using its eminent domain power. When such power is exercised, the Government is only required to pay just compensation and not any ridiculous sum demanded by a contractor.

13. "T". Acquisition of this Part is Controlled by QPL Procedures."

The use of qualified products lists should be eliminated. QPLs discourage qualified small businesses from competing and perpetuate costly sole source contracts because a small firm cannot readily afford to invest substantial sums to qualify on the mere possibility that it might be awarded a contract. If QPLs are retained in order to reap the cost savings of competition and broaden the industrial base, DOD should reimburse the cost of qualifying as a source for parts now purchased on a noncompetitive basis.

14. "U". This Part is Uneconomical to Compete."

As previously noted, the Comptroller General has ruled that competitive procurements cannot be avoided because contracting personnel believe that noncompetitive procurements would be cheaper. In addition, if used to justify a noncompetitive award of an under \$10,000.00 contract to other than a small business, AMSC "U" would violate the Public Law 95-507 provisions reserving such contracts for small business concerns.

15. "V". This Part has been Designated a High Reliability Part Under a Formal Reliability Program . . . Continued Control

by the Existing Source is Necessary to Ensure Acceptable Reliability."

AMSC "V" is legally deficient because it deprives small businesses of their right to have SBA make the final determination as to their capability to perform under its Certificate of Competency Program and may result in de facto debarments without due process of law.

16. "W". This is a Commerical Part for Which the Government Does Not Have Detailed Data . . ."

"W" should be amended to require exploring the feasibility of purchasing such data for competitive procurement purposes.

17. "Y". The Design of this Part is Unstable . . . Limited Acquisition from the Present Source is Anticipated Pending Configuration Changes."

There is no legal authority permitting noncompetitive procurements because a design is unstable. There is no logical reason why interim needs cannot be purchased competitively pending a configuration change.

18. "Z". Acquisition of this Part from the Current Source is Necessary to Ensure Standardization and Interchangeability of Parts."

"Z" is unnecessary because such situation occurs only when the Government cannot obtain necessary technical data, a situation covered by the AMSCs.

XI. The Result — Increased Cost, Diminished Small Business Opportunities, and Erosion of the Defense Industrial Base.

- A. SBA Study Shows Potential for Saving Billions of Dollars by Eliminating Present Restrictive Practices

As a result of DOD's restrictive procurement practices, original systems manufacturers have taken advantage of their sole source status by charging the Government premium prices for spare parts. Our members have told us that as a rule, they can profitably sell high quality spare parts at one-third to one-half the price presently paid by the Government. The potential for large savings is documented by a September 4, 1981 SBA study prepared at the request of the House Small Business Committee of cost savings realized when 181 parts were converted from sole source to competitively bid.¹⁷ The study showed a savings to the Government of \$6.7 million for these 181 parts over a period of approximately one and one-half years, a savings of 38.5% of prices previously paid. The 181 parts broken out are a drop in the bucket compared

^{17/} SBA Study, *supra*, n. 2

to the 3.9 million spare parts presently purchased by DOD. Of these 3.9 million spare parts, the study notes that only 300,000 or 7.9% are presently purchased on an openly competitive basis, leaving more than 3.6 million parts for future potential breakout. If these 3.9 million spare parts, which cost the Federal Government about \$10 billion per year, were competitively bid and the savings approximated those in the SBA study, the Federal Government could get the same products for about \$4 billion less and the savings could reduce the federal deficit by that amount. Finally, a recent GAO report concludes that SBA may have understated the potential for savings.¹⁸

B. DOD Practices Result in Diminished Small Business Opportunities

Highly qualified small businesses are also deprived of a multi-billion dollar market. Although many small companies presently manufacture spare parts as subcontractors, this arrangement leaves them at the mercy of large original systems manufacturers. The large original systems manufacturers generally take such contracts in-house when business is slack to maintain their workforce. Aside from skirting Small Business Act provision relating to Certificates of Competency, such action hardly seems consistent with the Small Business Act statement that "It is the declared policy of the Congress that the Government should aid, counsel, assist, and protect, insofar as possible, the interests of small-business concerns in order to preserve free competitive enterprise, to insure that a fair proportion of the total purchases and contracts and subcontracts for property and services for the Government . . . be placed with small-business enterprises."¹⁹

C. DOD Practices Contribute to Inability of Industrial Preparedness

Another result of his questionable mode of purchasing spare parts is the present sorry state of our defense industrial base. In a December 31, 1980 report entitled "The Ailing Defense Industrial Base: Unready for Crisis," the Defense Industrial Base Panel of the House Armed Services Committee pointed out that the private sector would be unable to surge production in order to respond to a national emergency. It is also a well known fact that as a result of present long lead times for spare parts, the Air Force has been cannibalizing planes to keep others operational.²⁰ Aside from the billions that would be saved annually by eliminating the sole source procurements sanctioned by the Breakout Regulation, the development of alternative sources of supply would significantly strengthen this nation's capability to respond in time of crisis.

XII. DOD Should Conduct this Rulemaking Effort in Accordance with the Small Business Regulatory Flexibility Act in Order to Maximize Small Business

^{18/} GAO Report, *supra*, n. 3

^{19/} 15 U.S.C. § 631.

^{20/} Mossberg, *Out of Action: Many Air Force Planes Can't Be Flown for Lack of Spare Parts*, June 1, 1981, p. 1.

Participation and Assure that Due Regard Be Given to Small Business Interests.

DOD has not complied with the "Small Business Regulatory Flexibility Act," Public Law 96-354, in conducting this rulemaking effort. Such act requires agencies to use special techniques to assure the participation of small businesses in the rulemaking process, such as (1) publication of a notice in publications read by small entities, and (2) a direct notification of affected parties.

The Regulatory Flexibility Act would also require that the notice of proposed rulemaking contain an Initial Regulatory Flexibility Analysis which sets forth:

- the reasons for the proposed rule;
- its objectives and legal basis;
- an estimate of the number and type of affected small businesses;
- a statement of anticipated compliance requirements;
- identification of any federal rules which it duplicates, overlays, or conflicts with (such as the Small Business Act, Armed Services Procurement Act and OFPP Circular 80-6); and
- a description of significant alternatives which accomplish the stated objectives and minimize the economic impact on small businesses.

In light of the massive impact of the Breakout Regulation on small business, such an analysis should be made by DOD. Furthermore, DOD has no right to blatantly ignore this landmark small business legislation.

XIII. Conclusion

In summary, NTMA is disturbed by current legally questionable DOD Breakout directive which excludes our members and other small businesses from spare parts contracts. The proposed DAR Supplement would have the same noncompetitive result and suffer the same legal deficiencies. As previously noted, NTMA member companies are capable of performing spare parts contracts at considerable savings to the taxpayer and with shorter lead times.

We are not asking for a handout but only a fair chance for our small business

membership to serve our country's defense needs by competing for contracts which, in most cases, they can perform more economically than the incumbent sole source contractors.

If you have any questions, or if we can be of further assistance, please let us know.

Sincerely,

A handwritten signature in dark ink, appearing to read "W E Hardman". The signature is fluid and cursive, with the first name "W E" being more prominent and stylized than the last name "Hardman".

William E. Hardman
Executive Vice President

WEH:tjc

Senator THURMOND. Thank you.

Is there any further information?

That completes the hearing.

We will leave the record open.

[The prepared statement of Mr. Malcolm T. Stamper of the Boeing Co. submitted for the hearing record follows:]

STATEMENT BY MALCOLM T. STAMPER, PRESIDENT, THE BOEING CO.

INTRODUCTION

Thank you Mr. Chairman and Members of this Committee. I am Malcolm T. Stamper, President, The Boeing Company.

I appreciate the opportunity to submit a statement here today on the subject of spare parts. We share your concern, and the concern of the Department of Defense, regarding the cost of spare parts. The Boeing Company recognizes its responsibility for the stewardship of tax dollars. It is our company's objective to supply cost effective, high quality systems, eliminate waste at every level and assure that the Government gets the greatest benefit for every dollar. I know this concern and responsible stewardship is shared by the vast majority of defense contractors.

PROBLEM

The current publicity alleging overpricing of spare parts has resulted in a public perception that industry routinely overcharges DoD for spare parts. The missing element of the story is that thousands of spare parts are delivered to DoD daily that are correctly priced and some are even underpriced. There are many factors such as standards, specifications, quality, regulations, delivery schedules and order size that affect the price of the part which is not readily visible and not covered by the news media. We are hard-pressed to believe that any major defense contractor would knowingly over-charge the Government for anything. Certainly The Boeing Company does not.

Any large volume business will have isolated problems which, once identified, will be corrected by its management. DoD has, through their many checks and balances, identified pricing issues to industry which have resulted in corrective

actions. Not obvious to the news media, nor reported, is that both DoD and industry have management systems in place which are monitoring prices for spare parts, procurement procedures and manufacturing processes which act to correct problems when they occur.

CAUSES OF THE PROBLEM

Boeing's view of the causes of the current spare parts issue is substantially the same as that of the Department of Defense. I would like, therefore, to refer to two DoD documents which describe these causes.

The first is a speech by General James P. Mullins, U.S. Air Force, Commander, Air Force Logistics Command, which was delivered to the Utah Air Force Association Symposium (ATTACHMENT A). In the interest of time, I have attached that speech and will only touch on a couple of the causes identified by General Mullins in his speech. His speech is a very good summary of the history leading to the current issue of spare parts.

Three of the causes cited in General Mullins speech are:

- o Manpower shortages forced focus on high dollar spare parts.
- o The Air Force decided to buy new planes in lieu of spare parts.
- o Fabrication of high technology metals is expensive.

The second source is the Secretary of Defense's memorandum of August 29, 1983 (ATTACHMENT B) which identifies many causes of the current spare parts issue.

Some of those identified are:

- o Tendency to order spare parts in extremely small quantities.
- o Insufficient reprocurement data to allow competitive procurement.
- o Inappropriate make or buy decisions by a prime contractor.

The only additional comment we wish to make is the ordering of less than an economic quantity is, in our opinion, the largest single reason for spare parts prices being higher than their perceived value.

BOEING ACTIONS AND RECOMMENDATIONS

Boeing has taken action to address the spares problem. In my letter to the Deputy Secretary of Defense (ATTACHMENT D), I stated that it is our intent to cooperate with the Department of Defense in the search for the optimum solutions. I issued a memo to all Boeing Company division heads which directs that uniform and concerted actions be taken which address the spare parts issue. I would like to quote the first two paragraphs of that memo (ATTACHMENT E):

"As Boeing employees, we have a responsibility to give our Defense Department customers their money's worth, and spare parts procurement is an important part of this effort. We must give high priority at all levels of the Company to practices that will achieve economies in designing and producing the spare parts required to assure readiness in the nation's defense systems. This will include the establishment of procedures to assure that in processing spare parts orders we will advise DoD of appropriate and available alternatives that would be likely to result in significantly lower prices. These would include such methods as quantity purchases, competitive procurement, substitute parts that meet applicable military specifications, or DoD making the part itself, etc.

If the buying agency still wants the order to be filled as placed, or if emergency requirements preclude any consideration of alternatives, we will accept the order and exert diligent efforts to perform it efficiently and economically."

Now let me be more specific on actions we are taking and recommendations we are making to the Department of Defense:

- o We consider ourselves responsible to advise the DoD of any potential economies which we feel could be exercised in the procurement of spare parts. We are advising the DoD of economic order quantities when savings clearly can be made.

There are cases where the unit price of a part can be reduced substantially through quantity orders.

- o When we think that the DoD is better served through competitive procurement of a spare part, we are suggesting this to DoD buyers. Further, we are advising these buyers of alternative sources of which we are aware.
- o When parts substitution is technically and economically feasible, we are recommending these substitutions to the DoD customers. Such substitutions frequently are appropriate in aging avionics equipment.
- o There are occasions when the DoD can fabricate a spare more cheaply than it can be bought from a contractor. Examples of such items are seals and tubing which are simply cut from bulk stock. We are recommending this approach when it appears appropriate.
- o An item which deserves attention and which can reduce spares costs dramatically is pipeline time. An investment spare often is in the transportation pipeline to and from the operational units longer than it takes to repair the part at the repair source. Cutting this pipeline time in half doubles the availability of a spare. Any savings in pipeline time is directly translatable into more available spares. This particular area merits immediate and intense scrutiny.
- o The use of specialty shops for small parts is also an area that needs attention here. However, there is a caution. The cost trade must be realistic, taking into account all procurement factors, or we will be achieving a false economy by passing costs from one segment of the procurement process to another.

- o Commercial parts have their place, maybe not in the heart of a bomber halfway through its mission, but there are plenty of ground applications such as trainers and ground support equipment.
- o Commercial packaging is another area that is often overlooked. It will take some relaxation of military standards but there is a savings to be made. A joint study of the military standards may be in order.
- o The current publicity and attention surrounding spare parts prices have dealt almost exclusively with low value expendable spares. The attention is good, of course, but it may not be cost-effective to add hundreds of people to the logistics process to, in effect, chase low value parts when the real leverage on the cost of spare parts lies in the investment spares area. These are the items that are repaired and reissued when they break or malfunction. That's the area where joint DoD/contractor efforts can really pay off. I'd like to touch on some approaches to this problem. Here are some of the cost drivers of investment spares:
 - o The thoughtful application of very large scale integration and very-high-speed devices in electronics design can reduce the number of investment spares required. We must address these in the design process in the same way.
 - o Because of the rate of change of technology, the useful operational life of systems and subsystems is decreasing. In spite of this, we continue to make the enormous investment in the

three-level organic maintenance concept for our systems.

The current three levels of maintenance are:

- (1) Organization base level (remove and replace black box).
- (2) Intermediate level (remove and replace card in black box).
- (3) Depot level or contractor plant (remove and repair the card).

The cost of establishing and maintaining an intermediate level to replace cards is difficult to justify in today's environment. A two-level maintenance concept reduces the initial test equipment cost and requirements for spare parts and manpower. Weapon system improvements can be incorporated without the cost of modifying intermediate level equipment, spares, technical data and software. If the production of spare parts -- investment as well as replenishment spares -- is integrated with the production of the prime mission equipment, large savings can be realized. The big hurdles here are a change in spares procurement philosophy and a change in the funding approaches for weapons systems. This practice should be the norm, not the exception.

Large corporations involved in defense contracting are highly competitive. Employees are trained and encouraged to bring down the cost of every part that goes into an aircraft or missile. A large part of our management is involved in cost cutting and we do a very good job in that respect.

At Boeing, like many other companies involved in defense work, we have an employee suggestion program. We know that even after the managers, scientists and engineers do their best -- when the machinery is put into motion -- the man doing the work sees something we did not. So in order to obtain an assured feedback from this work level, we have maintained an employee suggestion system. We offer up to \$10,000 for suggestions that will result in a proven savings.

Between January of last year and June 30 of this year, 28,284 suggestions were accepted out of 32,278 submitted. These suggestions brought about savings estimated at \$86 Million, benefits which are also shared with our customers. Our engineers are constantly reviewing their work in search of improvements to our products.

Examples of our suggestion system savings in our various divisions are included in ATTACHMENT F.

SUMMARY

In summary, I would like to talk about the small plastic cap that fits on a stool on the AWACS and cost the Government an absurd amount of money when three spares were ordered. To say that we at Boeing were embarrassed would be to put it mildly. We went into the factory to try to understand what mix-up had caused this occur. I'll spare you the details and just say that it never should have happened. The cap was overdesigned, the price was proportionately high and it was bought in uneconomical quantities.

The engineer who designed the part to fit over the end of the stool wanted it to fit firmly into a groove on the floor of the airplane, so that the stool would not wobble or move even in turbulence when a navigator stood on it to take sextant readings.

He took the conservative approach. He made it even better than it needed to be.

It shouldn't have happened, but I can't guarantee that something like it won't happen again. Because I know of no way to teach an engineer to do everything right on the first design. And if he errs, we ask that he err on the side of too much rather than too little. Be safe, not sorry.

Is it too hard to imagine that designers who have no peer in the world in inventing and creating -- who know that the failure of a part might cost the loss of an airplane or weapon system -- might overdesign a part that is not critical?

Are there other overdesigned and overpriced parts among the nearly half-a-million that make the AWACS plane the finest of its kind in the world? Probably. And that's why we keep going back to our drawings, looking at parts and subsystems even after an airplane is built and flying, looking for ways to cut costs without compromising safety and performance.

Incidentally, we did redesign that stool cap, found it commercially available from an outside supplier, and traded three new ones for the original caps at a fraction of the cost to the Air Force (ATTACHMENT G).

There obviously are some flaws in our systems and process that caused the stool leg incident. I don't look at all mistakes that are uncovered as "Horror Cases." I think they're "Hero Cases" and we reward our people for this. The more mistakes we find and correct, the smarter we get: If you're not making mistakes, you're not trying hard enough. If all of your developments work, you're not at the leading edge of science or design. You have to go 'til you fail to find your upper limits. In defense work, the side that stretches that limit the farthest, wins the contest.

If we held a press conference each month and showed the best results of mistakes we had found and corrected, and called them "Hero Cases" instead of "Horror Cases"; if we picked just the best dozen of the 100 per day that the employees submit; would anyone come to our meeting? - If so, would they come to the second one?

Is there really any news value or interest by the public in the countless examples of how we've saved money on defense projects? Why isn't it just as thrilling to hear the good news?

If you're really interested in lowering costs, it is far better to make heroes out of people who find mistakes and correct them the fastest, than to spend time criticizing and vilifying the people who made them.

Who are these people? In Boeing's case, it is thousands of managers, and scientists, and clerks and typists and hourly-rated workers, and engineers, and accountants and welders, and riveters, etc., etc., etc. These workers are taxpayers and American citizens deeply interested in their country's welfare. These same employees purchased over \$34 million in Government bonds last year and donated \$8.2 million to the United Way Fund.

Last year Boeing employees drove the cost of producing an ALCM missile from 4500 manhours to less than 1000 manhours/unit in record-shattering time by improving every facet of the missile from design to production to test.

Anything made by humans can be improved. Thomas Edison, on his 250 failure to make a successful lightbulb said, "I've found 250 ways not to make it." He also said, "There's a way to do it better -- find it." 747s and lunar rovers and Saturn boosters and AWACS and B-52s and Minutemen don't just happen -- they're designed and redesigned and redesigned and the people who do it are incredibly talented, patriotic, dedicated Americans from top to bottom, and the public and the press and the Government and their stockholders can be proud

of them. But, they are like Edison, on the way, they are also finding ways not to do it.

We have looked at important ways to change the way we procure and price spares, and every effort should be made to accelerate those improvements into being. We will work very closely with the Department of Defense and the Services in implementing and operating these new initiatives. We have a positive attitude about improving spares procurement and support the objectives of the Defense Department with enthusiasm.

ATTACHMENT

- ATTACHMENT A -- Speech by General James P. Mullins, USAF, Commander, Air Force Logistics Command to the Utah Air Force Association Symposium
- ATTACHMENT B -- Secretary of Defense Weinberger's Memorandum to the Services, dated 8/29/83, subj: Spare Parts Acquisition
- ATTACHMENT C -- Secretary of Defense Weinberger's Memorandum to the Services, dated 7/25/83, subj: Spare Parts Procurement
- ATTACHMENT D -- Malcolm T. Stamper's Memo to Deputy Secretary of Defense Paul Thayer, dated 9/16/83, concerning Spare Parts Acquisition
- ATTACHMENT E -- Malcolm T. Stamper's Memo to Boeing Division Presidents, dated 9/16/83, subj: Spare Parts Acquisition Procedures
- ATTACHMENT F -- 3 enclosures -- Suggestion System Performance
- ATTACHMENT G -- Boeing Aerospace Company's Letter to HQ Oklahoma City Air Force Logistics Center, Tinker AFB, Oklahoma, dated 8/22/83, concerning refund of spares pricing on AWACS stool end cap.

KEY SPEECHES 11

Another in a series of speeches on issues of importance to the aerospace industry and to the nation

AEROSPACE INDUSTRIES ASSOCIATION OF AMERICA, INC.

A Perspective On Spare Parts Pricing

By GENERAL JAMES P. MULLINS, USAF
Commander, Air Force Logistics Command

We've heard a great deal about defense, about the threat of tyranny we face, and what has to be done to defend against it. Clearly, we in this country must cope with a very serious and dangerous situation, one which demands our military capability be absolutely unquestioned in the minds of all potential adversaries.

Our ability to deter aggression is premised directly on the combat capability of America's armed forces—and this, in turn, rests squarely on the shoulders of the free enterprise system and private defense industry. Throughout our history, the special synergism of the military, working with private industry in a competitive environment, has served us well. Indeed, it has provided the innovation and excellence which has protected this democracy for over 255 years.

But is the system still serving us well? Has private industry been providing this nation with the most combat capability possible for the resources and effort invested? These are serious questions—given recent spare parts pricing excesses uncovered by internal audits—and the

revelations in the media and elsewhere of \$38 machining screws and \$2,000 pairs of pliers. Clearly the way we buy and purchase spare parts has been indicted—and just as clearly, grave concerns about the credibility of the system have been raised, concerns which could, in the final analysis, undermine the security of this country.

Without doubt, Americans have both the right and the duty to demand a full return on their tax dollars, especially those used for national defense. That's why the indictment of spare parts pricing is so serious. For not only does it demonstrate waste—which by itself is bad enough—but it also hurts the credibility of vital defense programs and effectively decreases our ability to buy the protection this country needs and must have.

Of course, an indictment is not a judgment of guilt, rather, it's an indication that something's gone wrong, and that something needs to be done to fix it. That's why it's so important that we objectively look at the facts and discuss the issues—and that we effectively treat the disease, not

just its symptoms. Frankly, that's why I'm taking this opportunity to address the parts pricing problem and discuss what's being done now and what can be done in the future.

I believe the problem stems directly from what, pretty clearly, was a breakdown in the way we in the government used the free enterprise system. The causes of the breakdown, of course, were many. For one thing, there was substantial economic inflation in our country, especially in the aerospace industry. Then there was the "decade of neglect", years of gross underfunding for defense with the attendant loss of much of our industrial base, along with the loss of many skilled and experienced professionals in government service.

We also made the decision years ago to buy in small quantities, which violated a cardinal rule of free enterprise economics. Then we had to pay the price of material and manufacturing demands associated with modern military technology; and, at the same time, we had to bear the high cost of "carryover technologies" to keep

older systems operating. Finally, we had to deal with vastly increased requirements, many of which were unprogrammed and most of which needed immediate attention in terms of our national security.

Inflation and Defense

I'd like to begin by briefly discussing economic inflation in general, and defense industry inflation in particular. The basic underlying fact is that most things cost more now than they used to—in many cases, a lot more. Soft drinks often sell for 60 cents or more when in the '50s they cost a nickel; the price of a new family car can easily exceed \$15,000 today, when not that long ago it was under \$3,000. And these just reflect general inflationary trends in the American economy.

For the aerospace industry, the cost of new technology—including the sophisticated training, high cost R&D, and elaborate, specialized tooling required—has caused a much higher inflation rate. In fact, the normal aerospace inflation rate has been at least 20 percent in recent years, about double the general rate of inflation.

But how could the price of a particular component rise an order of magnitude in just a year, or even a few months? Could such increases be attributed to "normal inflation"? The answer, in some cases, is "yes," for very often the price increase reflects far more than a single year's inflation. For example, consider an item which hasn't been purchased for maybe 10 or 12 years. In some cases, the price in the catalog is simply a reflection of the cost of the last purchase, a figure which has been carried over year after year, and now has little relevance to present economic realities. It's analogous to finding an old Sears catalog in the attic, putting today's date on it, then comparing prices to what's in the store.

But past years have also contributed to the pricing problem in ways others than simple economic inflation. In terms of national defense, the '70s has been called the "decade of neglect"—and not without considerable justification. After the Vietnam War, there were many years when the military suffered slashed budgets. In terms of Fiscal Year 1983 constant dollars, for example, the 1968 budget was slightly over \$80 billion. This dropped to just over \$68 billion by '71, to about \$50 billion in '74, and even went lower than that in '77. In fact, only since 1980 has defense spending gone up, but even the FY 83 level is well below that of 1968.

Modernization Problems

During that same period, however, the Air Force had to modernize its force. With dollars so hard to find, the decision was

made to buy new airplanes at the expense of spare parts. For example, by FY 76, the Air Force was funding spares at 37 percent of the requirement, and by FY 80 spares funding had fallen off to only 24 percent of the requirement. Considering the new weapon systems coming on board, we were setting ourselves up for a serious spares deficiency, one which would come back to haunt us in the future. Now, the future is here—and frankly, we're paying the price for those earlier decisions.

In addition, we bought far fewer new systems during the '70s. Much of the new capability, in fact, was coming not from new systems, but from modifications of old systems—and, like keeping an old car longer, that alone set us up for the increased need of spare parts.

But more than new system acquisition suffered from our neglect of yesteryear. At the time of these military cuts, we were also effectively destroying much of our defense industrial base. In fact, almost half of our defense suppliers, with all their experience and expertise, simply vanished during the '70s. The number of aerospace suppliers alone dropped almost 42 percent, from 8,000 in 1967 to a little over 3,000 by the 1980s. Fewer defense suppliers meant longer lead-times—but more importantly, it meant less competition, which is the very essence of American free enterprise.

Another aspect, of course, was the loss of skilled defense workers, both in and out of the government. In the private sector, as defense contracts declined relative to non-defense opportunities, many experienced people were driven from their defense-related jobs. In fact, as we entered the 1980s, private defense industry faced potential shortfalls of 33 percent for engineers, 49 percent for computer specialists, and 84 percent for statisticians.

In the government, a devastating toll was taken in terms of skilled and dedicated workers, many of whom were involved in negotiating procurement contracts and monitoring pricing. During the 1970s, Air Force Logistics Command alone suffered a 31 percent reduction in civilian personnel—professionals with hard to find expertise and years of experience. In fact, many of the arbitrary personnel cuts we took in this command left us with far fewer people to do a job that was to increase greatly.

High-dollar Focus

The result was that we in AFM had to prioritize our efforts on the higher price items like turbine blades, neglecting to some extent, the screws and bolts. In other words, manpower shortages forced us to focus our attention more on high-dollar parts, with the inevitable loss of

some price monitoring on those of lower value.

Another by-product of underfunding was the need to make smaller purchases. We all know that there's almost nothing you can't buy less expensively if you just buy more of them: that's another reality of free enterprise economics. Applies by the bag, oil by the barrel, corn by the gross—these usually constitute the best deal. In fact, go to any car dealer and offer to buy a fleet of cars, and see what you're offered in terms of unity price and maintenance. The same thing is true in the spare parts business: place an order for, say, 20,000 circuit boards, and you'll get a good deal in terms of unit price. But buy only a few, and you'll pay much more—especially if you amortize the costs associated with research and development over those few items.

In recent years, because of cuts in defense funding, like a family on a tight budget we haven't been able to buy large quantities of many items. We just couldn't afford them. One look at the history of spares funding during the past decade or so will confirm that. In other cases, because of cuts in numbers of systems, we simply haven't needed that many parts—so we had to buy fewer. And in still other instances, because evolving technology has tended to outdate some equipment so quickly, we couldn't run the risk of investing in large numbers of items, especially when we knew modifications would be coming down the road. The result, of course, is that we've often paid a lot more for each item purchased. And that's significant, because increases in item cost are really what's attracting so much attention these days.

Technology's Impact

Rapidly evolving technology also served to force prices up rapidly, especially in an environment where competition for resources was keen, and suppliers few. For example, much has been made lately of the high cost of what appear to be common household items. Consider that particular machine screw for the F-4 aircraft which costs \$30. How on earth can a single machine screw cost so much when any hardware store will sell you a bag of machine screws for a buck? Just how good does this fastener have to be?

First of all, you don't buy these kinds of fasteners in the local hardware store. Common machine screws are made of steel alloy, and if they're good quality they might even be galvanized. But they're easy to make from materials which are readily available from many sources.

The screw for the F-4, on the other hand, is not made of steel, but rather, titanium and tungsten. It is a highly precise device, one which is difficult to machine and

which must exhibit a critical hardness. It may look like an ordinary machine screw—but in the realm of high technology, high performance aircraft, looks don't count for much; strength, heat resistance, and precise tolerances are what really make the difference.

In many of our new weapon systems today, high technology has driven us away from the inexpensive and readily available steel and iron of yesteryear. Now we rely on exotic substances—strategic materials, many of which can only be obtained from a few non-competitive sources, often at premium prices. Consider cobalt, which is used in F100 engine parts for the F-15 and F-16; after the 1978 Shaba rebellion in Zaire, a major supplier, the price rose 246 percent.

And that's just the price of the raw material. It doesn't include transportation and the skilled labor and sophisticated equipment necessary to actually form or fabricate this material. And, as mentioned before, much of the skill and capability pool dried up years ago during the "decade of neglect." So when you look at large cost increases in spare parts, you have to remember that many of these costs reflect the price of buying and working such elements as titanium, manganese, tantalum, cobalt, platinum, and chromium.

Also, with fewer defense contractors available and increasing demands in terms of technical sophistication and materials, we've been forced to do business with fewer companies, with the inherent loss of competition. In fact, through 1982, the Air Force only spent about 20 percent of its procurement dollars on a competitive basis.

Additional Impacts

The competition problem has been exacerbated by the proprietary rights many contractors maintain over their data, as well as the urgent need we've often had for the parts themselves. After all, these parts do represent the security of this nation and doing without them is not a viable alternative. Indeed, it's not unlike having your new, fuel-injected car break down in the middle of the desert with only one qualified mechanic around. Generally speaking, there are two truths in a situation like this: you have to get the car fixed; and it won't be cheap. Such is the law of supply and demand; such is the cost of new technology.

But the cost of new technology alone is not the culprit; older technology also plays a big part in driving up prices. Machines tend to get more expensive to maintain as they age. They tend to break down more often, and parts become harder to find—and when you do find them, they can cost "an arm and a leg."

For example, anyone who tries to maintain, say, a five-tube AM radio from the '60s will find that replacing just one of the tubes today can cost more than the entire radio cost originally. In this case, the vacuum tube technology of the '60s has been replaced in our society by modern solid state devices. In effect, there's little competition left in manufacturing vacuum tubes these days. That's why the cost of supporting vacuum tube radios is now so high. In fact, that's why most people have thrown away their five-tube radios.

During the 1950s, we handled technological advances differently than we do today. Think about it. We built about 2,000 B-47s—but when the B-47 technology became outdated, we basically threw them all away and built over 800 B-52s to replace them. But those B-52s haven't been thrown away, even though they're almost three decades old. Unlike five-tube radios, given the budget restraints in past years, it's just been too expensive to replace them. And the B-52 is not alone, for this pattern generally holds true for the entire fleet. Today, in fact, the average Air Force aircraft is almost 14 years old, not counting Guard and Reserve systems, many of which are even older. And there are fewer contractors around to support them.

This lack of competition, then, has helped create the dramatic increases in the cost of many spare parts—because, frankly, not many companies want to make them anymore. Indeed, for the few defense contractors left, the technology required is often no more than an anachronism of the past—something in which there is no future and no growth potential, something which the free enterprise system tends to reject.

Just who wants to be trained in "vacuum tube" technology today? Where do the contractors find the skilled people? Frankly, that's why spare parts for old airplanes can be so expensive—and that's why the price can go up so fast as newer technologies diffuse exponentially throughout our society, displacing that which is out of date, but which we still have in service.

New Influences

Now for the *coup de grace*. About the time the neglect of the '70s came to bear—including the effects of budget cuts, limited buys, reliance on strategic materials, reduced competition from the loss of so many defense contractors, the reality of fewer skilled people in and out of government, and the increased burden of supporting old technologies—about the time all this happened, and at a time of high economic inflation, the Soviets invaded Afghanistan, the Iranians took their American hostages and the nation found a

new awareness of the threat to its security.

The result, of course, was a dramatic increase in military requirements, along with additional funding to meet these requirements. But we were least time away in terms of getting the skilled people, the industrial capability, and the kinds of sophisticated, computer-based management systems needed to cope with the problem. Yet the requirement to buy was "right now."

Beginning in 1980, there was great pressure on the Air Force to somehow catch up, to overcome the deficits incurred during the '70s. In fact, Air Force outlays in constant dollars rose as fast then as they had fallen 10 years earlier. The emphasis was on getting combat capability, causing us to buy faster but at higher cost.

Such procurement mechanisms as the fixed price redeterminable contract were used to ensure we got what limited capability our defense industry could bring to bear. The only way to get what we needed was to commit ourselves well in advance to a future buy, without knowing what the exact price would be—in effect, playing the "futures" market in defense. And in many cases, the prices turned out to be very high.

That, in a nutshell, is how we got to where we are today—but just where are we? How serious is the parts pricing problem? Clearly, the problem is very serious—but given the causes and the situation, it is neither as surprising nor as widespread as many would have us believe and it is certainly not a malevolent manifestation of a corrupt or incompetent system.

In fact, it was the system which first brought it to light. The Hancock Report, which came from AFLC's Oklahoma City Air Logistics Center, first identified items believed to represent wasteful, tax expenditures.

The investigation did not start in the press; rather, it started as a normal Air Force inquiry. And Mr. Hancock was not a "whistle blower" running counter to the wishes of the system; he was doing exactly what he was hired to do by the system. Indeed, there's been no cover up by the government; there's only been an "uncovering"—one which has included internal AFLC audits, a General Accounting Office investigation, and many other federal investigations.

Corrective Actions

In terms of parts pricing, we do have very serious problems—there's no denying that. And just as clearly, considering that our national security is on the line, we must take strong action to ensure we absolutely correct whatever deficiencies exist in the system.

To that end, the Secretary of Defense

has ordered that we develop new procedures to increase competitive bidding, that we challenge all prices which are out of line, and that we refuse to pay any price which is proven to be unjustified. He has also directed that we accelerate reform of basic contracting procedures, that we get our money back if possible, and that we take appropriate action against contractors or federal employees who engage in excessive pricing practices.

Fortunately, we already have many mechanisms in existence to deal with the situation and carry out the Secretary's direction. And we have many more coming on line. For example, the Air Force's Zero Overpricing Program was established in 1979 to catch excessive prices resulting from overpricing of catalog errors. Using this system, any consumer in the system has the means to challenge his bill before it's paid. In 1980 alone, there were 3,000 challenges on prices, and that number rose to 5,000 in 1982. About 10 percent of these have been found to be overpriced items, while another 12 percent have represented catalog errors—and we're taking action to get our money back.

We've also established the Office of the Competition Advocate in all five ALCs with coordination in the headquarters at Wright-Patterson Air Force Base. The purpose here is to generate initiatives which will emphasize competition and competitive pricing.

And we've developed another program called PACER PRICE, which has already screened 529,000 items for evidence of dramatic price increases. What we've found is that, from 1982-1983, only four percent of the items screened showed increases over 100 percent. Indeed, 92 percent of the items remained constant, or actually went down in price.

PACER PRICE now provides an effective mechanism to check the overall process of buying items with the goal of coming up with what the items should cost—and

then providing an effective review process when an item cannot be purchased at this validated price. We've already had some significant successes here.

For example, the \$2,000 pair of pliers mentioned earlier was identified by this process, along with the fact that the price should have been a bit over \$200. The next time we bought them, we paid about \$225 each and the company refunded the money overcharged on the earlier buy.

We've also gone out to our suppliers for their ideas on how to improve the way we let them know about potential business, and I've inaugurated a command-wide program to elicit from the work force their ideas on how we can ensure a fair price for the goods and services we procure.

There's also the Air Force Management Analysis Group, established by the Air Force to look at all aspects of spare parts buying, from up front in the acquisition process of a weapon system all the way through to maintaining the system during its life cycle in the field. The group has two objectives: to come up with long term procedural regulations to preclude parts pricing problems from recurring, and, in the immediate, short term, to do something right now to fix whatever problems we might be having.

Increased Demand, Decreased Supply

In conclusion, let me just say that the problem of high prices for spare parts came from a dynamic and complex set of social, economic, and technological influences—a holistic set of circumstances which effectively increased demand while at the same time decreasing the means of meeting that demand. In fact, to a great extent, the problem is simply a manifestation of years of neglect of one kind or another, including years when it was fashionable to attack the "military industrial complex" to reduce its profits and cut its business.

The long-term result, of course, has

been less national defense, often at a considerably higher price. In a free enterprise economy like ours, reducing competition never helps—it only hurts. For competition truly is the fabric of our society. It is competition which encourages innovation; it is competition which best applies resources to the task at hand; and it is competition which can make our national defense more affordable.

That's why I believe we must be careful in formulating long term solutions to the generic problem of defense costs, including parts pricing concerns. We must not strike out blindly at corporate profit, because such profit is what drives the American economic system. Indeed, profit isn't bad; on the contrary, it's really the life blood of the free enterprise system—and the free enterprise system is the life blood of our country.

Obviously, we must do a better job of controlling cost. And the free enterprise system will do that for us if we let it. But we first must create a more competitive, coherent defense environment, one where the profits are there to be made, but only by those companies which have the most innovative ideas and which succeed in supplying the best material at the lowest possible price.

To that end, I propose that "this is the place,"—and this is the time to get it going—for the military and industry to get their acts together and come out fighting for freedom, free enterprise and unfettered competition. That way we can provide this nation with the defense it needs at a price it can afford.

General Mullins' remarks were delivered to the Utah Air Force Association Symposium.

Additional copies of this speech may be obtained from AIA's Office of Public Affairs at the address below.

AEROSPACE INDUSTRIES ASSOCIATION OF AMERICA, INC.
1725 DeSales Street, N.W. Washington, D.C. 20036

ATTACHMENT B

THE SECRETARY OF DEFENSE

WASHINGTON, D.C. 20301

29 AUG 1983.



MEMORANDUM FOR SECRETARIES OF THE MILITARY DEPARTMENTS
CHAIRMAN OF THE JOINT CHIEFS OF STAFF
UNDER SECRETARIES OF DEFENSE
ASSISTANT SECRETARIES OF DEFENSE
GENERAL COUNSEL
INSPECTOR GENERAL
ASSISTANTS TO THE SECRETARY OF DEFENSE
DIRECTORS OF THE DEFENSE AGENCIES

SUBJECT: Spare Parts Acquisition

My memorandum of July 25, 1983, announced a ten point program on spare parts procurement. Procurement, however, is but one facet of the problem. While the focus of immediate attention, other aspects of the spare parts total acquisition process must get equal scrutiny. Improvement in all areas is essential. While this memorandum deals primarily with acquisition, attention next will be focused on the requirements process, the authorization and appropriation process, and the way we manage readiness and support.

I am resolved that the Department of Defense act decisively. Nothing short of our full management capability and technical expertise must be applied to this challenge. Our credibility before the Congress and the public is at stake. Accordingly, I am now directing the additional actions set forth below.

In some cases I have designated precise milestone dates. This is addressed in the enclosure, as is further discussion of selected actions. I am asking the Deputy Secretary of Defense, as Chairman of the Defense Council on Integrity and Management Improvement, to take the lead in providing overall guidance and coordinating your efforts. I expect him to monitor our progress.

Near-Term Actions (within 90 days)

- o Provide resources to induce desirable breakout, effective competitive procurement, and improved pricing in the acquisition of spare parts.
- o Apply the DoD Parts Control Program to enhance competition. The optimum use of standard military parts or commercially available parts in development of new systems will be mandatory.
- o Accelerate plans for acquisition of computer hardware and software to assist parts control personnel.
- o Institute action to identify disparities in spare parts prices within and among various procuring activities.

- o Employ value engineering to investigate spare parts where cost or price exceeds intrinsic value.
- o Assign more engineering resources to review new reprourement data packages for adequacy.
- o Develop and test a procedure to make breakout of spare parts a factor in source selection for new major systems. Develop new incentive arrangements to reward contractors for cost savings generated by their efforts.
- o Negotiate contract data provisions which, as appropriate, reduce contractors' proprietary rights in data. A DAR deviation is approved for this purpose.
- o Designate acquisition of spare parts and reprourement data as an agenda item in Acquisition Strategy Panels, Advance Acquisition Plans, and Acquisition Review Councils.
- o Revise performance evaluation factors for acquisition and logistics managers. Include emphasis on spare parts pricing, breakout, competition, and value engineering accomplishments.
- o Implement DAR Supplement No. 6, "Replenishment Spare Parts Breakout Program" upon receipt.
- o Consider in all contracts, as appropriate, the Government's right and ability to breakout and procure competitively spare parts.
- o Discourage use of government specifications and contractor proposed engineering designs that inhibit subsequent competitive procurement of spare parts.
- o Continue action on my "Ten-Point" Program to insure that prices paid for all spare parts are fair and reasonable.
- o Pursue appropriate refunds or other recoupments vigorously following any audit or other disclosure of incorrect pricing or overcharge.
- o Review existing contracts to fully address any and all opportunities for improved pricing of spare parts, including breakout and competition.
- o Instruct acquisition personnel to challenge any procurement action for spare parts where estimated or negotiated price appears unrelated to intrinsic value.

Mid-Term Actions (within 180 days)

- o Reexamine existing policy on patent and data rights arising under government funded IR&D.

- o Expand training curricula to insure proper emphasis, understanding, and technical skill level for all personnel engaged in the acquisition of spare parts.
- o Assign special task forces to review existing reprourement data packages for spare parts with high annual buy/quantity values.
- o Evaluate and make recommendations for changes to existing authorization, appropriation, apportionment, budgeting, and financial management practices, and regulations pertaining to acquisition of spares.
- o Pursue with appropriate Congressional Committees and their staffs the merit of a two-year authorization for acquisition of replenishment spare parts and consumables.
- o Insist upon contract terms and conditions in all future acquisitions that afford more equitable treatment and provide for greater assurance of fair and reasonable prices.

Long-Term Actions

- o Automate data repositories to improve the acquisition, storage, update, and retrieval of reprourement and technical data.
- o Evaluate and assess accomplishments under the near- and mid-term actions for additional policy direction, as appropriate.

I am aware of the burdens these actions impose upon you and your staffs. However, we cannot defer action until such time as additional resources might be authorized and become available. Your full cooperation is appreciated.

Enclosure

Joseph W. Kimbarger

OPTIMIZE USE OF STANDARD MILITARY PARTS OR COMMERCIALY
AVAILABLE PARTS IN DEVELOPMENT OF NEW SYSTEMS

The DoD Parts Control Program promotes use of military preferred standard piece-parts during engineering design, development, production, or modification of equipments and major weapon systems. The program fosters standardization, which leads to greater demand for standard parts, reduction in varieties of parts in inventory, resultant increased production runs, and competition through multiple sourcing. It is accomplished through the engineering review of non-standard commercial parts and recommended preferred standard item replacements. DoDI 4120.19, Parts Control Program (PCP), is required in contracts for major weapon systems, end items of equipment where logistics support is required, and in which acquisition managers foresee appreciable life-cycle cost savings.

I am directing action to require mandatory application of the DoD Parts Control Program (at the present time approximately 40 percent of weapon system contracts are using the program on a voluntary basis). DoDI 4120.19 shall be revised to reflect the change from a voluntary to a mandatory program.

DLA should proceed with plans for acquisition of computer hardware/software to assist parts control personnel to achieve real time processing. Submission of the DLA plans for accomplishment is directed within 60 days.

GIVE ACQUISITION OF
SPARE PARTS THE NECESSARY ATTENTION

- On August 2, 1983 I issued a revised regulation (DAR Supplement No. 6) dealing with the breakout of spare parts. It provides procedures for screening requirements for replenishment spare parts to break them away from systems contractors for the purpose of buying them competitively or from the actual manufacturer (breakout). The regulation enhances the cost saving objective of breakout, contains substantive revisions of a number of procedures, and incorporates features that increase the utility of resources devoted to the screening process. You will insure that your personnel immediately implement the designed purpose of this regulation as a matter of highest priority.

USE VALUE ENGINEERING TO INVESTIGATE PARTS WHERE
COST EXCEEDS INTRINSIC VALUE

The objective of Value Engineering (VE) is to identify more cost effective alternatives. An effective spare parts value engineering program must include procedures to identify those spares whose price is excessive and appropriate action to reduce unnecessary cost. Accordingly, each DoD component will:

- o Within 60 days institute at each spares buying activity procedures to "flag" price disparities in spare part contracts.
- o Assign adequate value engineering resources to review spares purchases and reduce excesses. Use ad hoc government VE teams, contract VE services, DoD personnel who currently have VE as a primary or collateral responsibility, and contract teams funded by the VE program clause of the DAR.
- o Revise the current Value Engineering Incentive DAR clause for all supply and service contracts of \$100,000 or more to mandate its use in contracts less than \$100,000 for spare parts. Effective immediately, contracts for spare parts and repair kits of \$25,000 or more for other than standard commercial parts will contain a VE incentive clause.

INSURE THAT PRICES PAID FOR PARTS ARE FAIR AND REASONABLE

Offer incentives to employees to increase competitive bidding and reward those who vigorously pursue cost savings. This requires beneficial suggestion/VE award programs specifically tailored to the acquisition of spare parts.

Take stern disciplinary action with those employees engaged in the acquisition process who are negligent in implementing our procedures. Performance in this area should be a scored evaluation factor in performance ratings.

Alert defense contractors to the seriousness of the problem and of our firm intention to keep prices under control. I expect implementation of an ongoing management procedure to insure continuing high level attention to this area. Action shall be taken to insure the high-level contractor management mirrors this effort.

Task Competition Advocates in all DoD components to challenge spares orders not made competitively or which appear to be excessively priced. Competition advocates must be provided sufficient authority to intervene directly in instances where policy is not being appropriately implemented. A draft DoD directive on competition advocates will be prepared and distributed for comment within 90 days.

ACQUIRE REPROCUREMENT TECHNICAL DATA UNENCUMBERED BY NEEDLESS
OR IMPROPER PROPRIETARY RESTRICTIONS

As part of the evaluation and source selection process, specific consideration will be given to breakout and competitive procurement of spare parts. Our ability, including cost to the Government, to acquire reprocurement data packages with unlimited rights thereto (given the nature and propriety of the prospective contractors' asserted rights) will be evaluated.

Examine and advise me of your views as to existing policy dealing with the rights accruing to the Government under IR&D.

Negotiate firm dates in new contracts by which "unrestricted" use of data encumbered by the contractor's background patents and/or data rights for data initially developed at its expenses will be available. Particular attention should be given to those cases where the Government has borne the major cost of development.

AUTOMATE DATA REPOSITORIES TO IMPROVE THE ACQUISITION, STORAGE,
AND RETRIEVAL OF TECHNICAL DATA

With state-of-the-art technology, the automated data repositories can:

- o Eliminate bottlenecks in paper/microfilm manual identification, retrieval, and individual reproduction operations.
- o Reduce the cost of repository operations and the cost of data.
- o Permit direct interface with industry and among the Services in computer-aided design (CAD) and computer aid manufacturing (CAM) systems.
- o Provide for computerized review and inspection, indexing, and verification of "rights in data" claims.
- o Provide for timely identification of the appropriate data and its subsequent delivery to the user or buyer via telecommunications.

The Services will support and fund the ongoing Tri-Service/Joint Committee on Printing effort to acquire and install prototype repositories with a target date for completion of FY 1987. The standard system specification has been defined. Plans to be supported by the Services include, subject to availability of funds:

- o Army. Installation at MICOM and CECOM in September 1984.
- o Air Force. Complement Army contract, and fund in FY 1984 for one system.
- o Navy. Installation at NPFC in September 1984. Approve of the NAVAIR system for implementation at the NAVAIR central repository.

ELIMINATE DISINCENTIVES ON INDUSTRY TO FACILITATE
BREAKOUT AND COMPETITION OF SPARE PARTS

What we do up front in the development of major systems and in obtaining adequate reprocurment technical data at the outset of production profoundly

influences our ability to break out spare parts for procurement from other sources. Clearly lacking is a motivational response needed from our major systems developers. Absent that, we will have simply modest improvement with no assurance that such improvement will continue. Therefore, we are considering two new efforts.

First, we must make breakout of spare parts a factor in the source selection of a major weapons systems developer. Second, we must couple this with incentive arrangements that provide the contractor a share in cost savings generated by his efforts. Such procedures will be developed for test at the earliest practicable date. These procedures have the potential of assuring long-term application and benefit without the need to increase significantly manpower resources, without substantially adding to acquisition costs, and without unduly prolonging procurement leadtime.

Following is a draft concept paper that discusses this in greater detail. I wish your constructive comments within 30 days with the full intention of designating a joint service and DLA task group to develop a comprehensive test program within 90 days. Full-scale implementation will be accomplished following evaluation.

"DRAFT" CONCEPT PAPER

SUBJECT: Enhancing (1) breakout and (2) competitive solicitation and procurement of both initial and replenishment spare parts for new major systems

PROBLEM: The cost of acquiring the subject parts is increased by any one or a combination of the following:

- o existing in-house "cost models" that distort prices paid for spare parts by inappropriately or disproportionately allocating the prime contractor's costs for engineering, manufacturing, material handling, G&A, and plant-wide variances as well as associated overhead charges and profit
- o tiering of vendor acquired spare part prices merely flowing through the prime contractor with the latter's overhead and profit
- o absence of effective competition for subcontracted items and vendor furnished parts
- o proprietary rights, data right, and patent right limitations
- o incomplete, inaccurate, and/or obsolete reprourement data packages
- o insufficient procurement leadtime
- o dated and/or incomplete knowledge of the industrial base
- o institutional biases on the part of industry and government

- o incomplete and/or inadequate "make-or-buy" program reviews
- o disincentives on contractors to break out vendor acquired parts for direct acquisition by the government
- o lack of positive incentives on contractors to break out vendor acquired parts for direct acquisition by the government
- o lack of government personnel resources with the appropriate skills and training to get the job done
- o lack of high level management attention in industry
- o lack of high level management attention in government
- o prior course of dealings, industry/trade practices, and tradition
- o late apportionment of fiscal year funds for O&M acquisition
- o incomplete, untimely, and inadequate acquisition planning
- o low volume buys
- o disproportionate emphasis on meeting operational requirements

DISCUSSION: The spare parts "problem" is not any one problem. It is many problems that vary in type, combination, and impact depending upon:

- o the point in time during the acquisition process when the issue is being addressed
- o the type, nature, and quantity of the spare parts at issue
- o the system that is being supported

There is no one solution. That is not to say, however, there is no solution. The problem area has to be broken down into functionally related components. There are:

- o problem(s) that are inbeing
- o problem(s) we are presently evolving
- o problem(s) that will arise in the future

This concept paper focuses primarily on how to avoid the problems in the future. There is some immediate transference possible, and that is encouraged.

ANALYSIS: Any conventional solution is invariably labor intensive. That makes it somewhat less than viable, irrespective of conceptual appeal. A solution to the problem is required that is:

- o not labor intensive in terms of government personnel
- o predisposed to alter in some meaningful way our traditional approaches
- o acceptable to industry, for the problem cannot be solved by the government alone
- o cost effective in a way that is readily apparent and demonstrable
- o easy to communicate to the acquisition work force, where the rubber hits the road
- o not so complex as to be difficult to comprehend or to implement
- o susceptible of being implemented within all of DoD with a high degree of uniformity so as to preserve the concept of "one face to industry"
- o not too costly, nor should it require substantial investments of program funds to initiate and/or accomplish
- o not contrary to the principle of decentralized management and the preservation of decisionmaking authority, flexibility, and discretion at the lowest possible level
- o financially beneficial to both industry and government

The solution dictates that it be approached early in the acquisition process while there is still effective competition to assure a reasonable degree of industry responsiveness and reasonable attendant costs. The techniques employed must be compatible with existing acquisition practices and require no new authorities, laws, or regulations. Additionally, it is at the earlier stages of the acquisition process where the leverage of any incentive is greatest because so much of the program is still prospective. The "work" must be accomplished by contractor personnel but not as "services." There must be on-going visibility by high level management in both industry and government. The rewards to industry must be immediate, near term, and long term; all three are required. The same holds true for the government. The rewards enjoyed must not be at the expense of otherwise realizable profits and/or incentive fees in a way that merely reapportions the profit pool. The payoff must be big to attract and to hold the continuing attention of all--including the Congress and the public. Lastly, implementation in the very near term should be possible.

SOLUTION: All basic tenets must be employed to be effective, but the quantitative measures should be assigned to, or reserved for, the discretion of decentralized management and planned on a case-by-case basis. The basic tenets are:

1. The competition leading to award of FSED for a major system should turn, in part, on the prospective prime contractor's technical and management proposals addressing such things as:

o Make-or-Buy Plan

- o Engineering Design in terms of furthering utilization of commercially available components, non-proprietary items, competitively available vendor material, military standard parts

o Management Plan to facilitate:

- early breakout
- parallel competitive sources for vendor items
- accomplishment of the aforementioned engineering design
- review of technical data packages for completeness, suitability, currency, and relief from inappropriate proprietary restrictions
- enhancement of the competitive vendor base and the establishment of new vendor sources during FSED and the early phases of initial productions

2. The prime contractor's additional engineering, design, and management effort to accomplish the objectives set forth in his proposal(s) for this express purpose should be a separately priced line item in the pertinent FSED contract.
3. The instant FSED contract should provide for an Award Fee modeled on the "report card" concept. It should provide for an award fee determination panel composed of high levels of government management; periodic evaluations to influence prospective behavior; written critique by the Service Secretary to the CEO; the immediate payment of all award fee amounts earned; and no rights of appeal.
4. The instant FSED contract should provide for a separate Memorandum of Agreement (MOA) between the prime contractor and the government. It would be negotiated with all offerors while still in proposal evaluation and source selection. The purpose for the MOA is to get advance agreement on the amount of the royalty and/or the licensing fee to be included in selected vendor prices. The fee arrangement would be expressed as a percentage of the item price paid by the government. Then, should those vendors later be awarded a contract directly by the government, the agreed-upon fee (having been included in the price) would be paid to the prime contractor by the vendor. A licensing fee would be proper if contract effort involved utilization of the prime contractor's proprietary data; a royalty fee would be proper when the prime's proprietary data is not a factor. The MOA would prescribe the term of years within which the agreement would be in force and on whom it would be binding. Any fees paid pursuant thereto would be in the purchase price of the vendor item--hence, it would be borne by the user. However, care must be exercised to avoid payment of royalty fees for break out that would and should have been otherwise accomplished as part of the contractor's normal responsibilities.

CONCLUSION: The proposed solution offers an immediate incentive. It can influence and even prove a determinant in proposal evaluation and source selection for a major system. It focuses attention on the problem early on, before design is complete and a subcontractor/vendor matrix established. By directly funding the contractor's associated effort, it does not increase his overhead costs and also becomes a direct cost on which other overhead can be charged and profit earned. However, as a direct cost, it must be done and done in accordance with the contract's terms and conditions. It is subject to government oversight. The award fee offers a near-term incentive while focusing high level management attention on the effort. The licensing and/or royalty fee arrangement offers a long-term and continuing incentive to make the program succeed because it returns profits to the prime without any investment of capital or on-going utilization of production resources. The arrangement can also be flowed down. It eradicates by offset all the incentives presently in-place that inhibit breakout, competition, and contractor assistance. It employs practices well known to the contracting community both in the private and public sector. It need await no special approvals or authorities to be tested or implemented. It does not add to procurement leadtime and, in competition, it should add little or no cost to FSED.

RECOMMENDATION: Immediately develop a TEST PROGRAM leading to full-scale implementation. The initial resultant guidance should be expressed in no greater detail than policy direction as would be found in a Directive or an Instruction. At an appropriate time, suitable DAR coverage could be published.

ATTACHMENT C

25 July 1983

MEMORANDUM FOR SECRETARIES OF THE MILITARY DEPARTMENTS
CHAIRMAN OF THE JOINT CHIEFS OF STAFF
UNDER SECRETARIES OF DEFENSE
ASSISTANT SECRETARIES OF DEFENSE
GENERAL COUNSEL
INSPECTOR GENERAL
ASSISTANTS TO THE SECRETARY OF DEFENSE
DIRECTORS OF THE DEFENSE AGENCIES

SUBJECT: Spare Parts Procurement

Our recent audits and investigations of aircraft spare parts accounts demonstrate conclusively that we must make major changes in the way we order and purchase spare parts. The directives we instituted in March 1981 to increase competitive bidding and hold down prices have not been enforced vigorously enough throughout the Defense Department.

To ensure that we are not plagued with pricing abuses in the future we have developed and put in place a ten point program. It is our joint responsibility to see that all civilian and military personnel in the procurement branches of the Department comply with these procedures.

First, we should offer incentives to increase competitive bidding and reward employees who rigorously pursue cost savings. Actions such as the Air Force's recent award of a \$1100 bonus to the Air Force sergeant who uncovered excessive overpricing on a spare part should be continued and given your personal attention.

Second, I expect you to take stern disciplinary action -- including reprimand, demotion and dismissal -- of those employees who are negligent in implementing our procedures.

Third, I have directed Deputy Secretary Thayer to work with the Service Secretaries to alert defense contractors to the seriousness of the problem and of our firm intention to keep prices under control. We expect them to ensure that their employees also pursue fair pricing practices by undertaking disciplinary action when necessary or rewarding employees where appropriate. I will carry this message to defense contractors in Hartford, Connecticut in a speech I will give there later this week.

Fourth, now that all of the Services have competition advocates in place in their buying commands, I expect those competition advocates to challenge orders that are not made competitively or appear to be excessively priced and I expect our procurement officers to heed their advice.

Fifth, we simply must refuse to pay unjustified price increases. I know the Air Force now carefully checks price increases on aircraft spare parts. If the price increase is excessive, the Air Force is refusing to pay it. Such efforts are already underway in the other Services and they should continue to receive the highest priority. To assist you in these efforts, the Defense Contract Audit Agency will work with your contract administration offices to strengthen spare parts pricing procedures and to assist in the negotiations of major spare parts purchases.

Sixth, we must accelerate reform of our basic contract procedures. The Inspector General's recent investigations underscore the importance of reforming our basic contract procedures to encourage competition, preclude overpricing and, as an added insurance, give us the legal right to recover excessive payments.

For example, many of our existing basic ordering agreements routinely carried a price redeterminable clause which allowed the manufacturer to set the price for repeat orders of spare parts. You should continue to phase out existing portions of ordering requirements which allow the manufacturer to redetermine prices and make every effort to obtain firm fixed-price contracts. We must redouble ongoing attempts to increase the number of contracts open for competitive bidding. -

Seventh, we must take steps to obtain refunds in instances where we have been overcharged. In those contracts where we have the right to reduce an excessive price and set a more equitable price, we should not hesitate to exercise that right. If we have to, we should sue a contractor to recover unjustified payments. In some cases the contracts we signed may not give us the legal right to a refund. In these instances, the Services and the Department should aggressively pursue refunds through discussions with senior managers of the company similar to those Secretary Lehman is currently conducting with the Sperry Corporation and Gould Simulation Systems Inc. We should convey to them our strong belief that it is in the best interests of both the Department of Defense and the defense industry to have contractors voluntarily refund any payments that are clearly exorbitant and unjustified.

Eight, where alternative sources are ~~not~~ available, we should cease doing business with those contractors who are guilty of unjustified and excessive pricing and who refuse to refund any improper overcharges. If alternate sources, domestic or foreign, are not available, we will do our best to develop such sources rapidly. In December 1982 we significantly strengthened our procedures for suspending and disbarring irresponsible contractors. We should exercise those administrative powers in a timely manner -- within 30 days of indictment or conviction of a contractor.

Ninth, our audits and investigations of spare parts will continue. In addition to the eight audits the Inspector General has already issued, Service auditors have issued some 25 others. The Inspector General has six additional audits in progress, and will begin three others in the next few months. These will focus on the broader ramifications of how we buy spare parts, what we pay for them, and how they are used and controlled once they enter the inventory. In addition to investigating aircraft engine spare parts, we will now look at cost growth in electronic spares and contract administration activities.

The tenth and final point is that the Defense Department purchases millions of spare parts worth billions of dollars each year. I think you will agree that in the majority of cases we have been satisfied with the quality and prices of those spare parts. The many fine corporations and dedicated employees supporting our nation's defenses should not be maligned as a group for the failures of a few. However, it is our responsibility to ensure that we do not waste one dollar of the taxpayers' money. We must make every effort to eliminate excessive pricing in the future, to recover unjustified payments we have already made, and where necessary, to expose and take appropriate corrective action against those contractors and employees who are either negligent in performing their duties or are engaging in excessive pricing practices.

Joseph W. Rindge

ATTACHMENT D

THE BOEING COMPANY
SEATTLE, WASHINGTON 98124MALCOLM T. STAMPER
PRESIDENT

September 16, 1983

The Honorable W. Paul Thayer
Deputy Secretary of Defense
Room 3E944, The Pentagon
Washington, D. C. 20301

Dear Mr. Secretary:

The Boeing Company recognizes its vital role as a major defense contractor responsible for the stewardship of tax dollars. We share your concern regarding the cost of spare parts to the government and have, therefore, taken additional steps to evaluate and improve our spare parts procurement practices.

We are sensitive to the Secretary of Defense's ten point program articulated in his memorandum of July 25, 1983 and his initiatives spelled out in the memorandum of August 29, 1983. We have already taken action on many of these initiatives while others are under discussion with DOD personnel for clarification.

Please find enclosed a copy of direction to the various Boeing divisions which supply spare parts to DOD formalizing corrective steps in spares procurement that have been underway for some time.

We appreciate the opportunity to work closely with DOD to improve the efficiency of our country's defense posture.

Sincerely,



Malcolm T. Stamper

cc: The Honorable
Caspar W. Weinberger

ATTACHMENT E

September 16, 1983

TO: L. D. Alford President, Boeing Military Airplane Company
R. E. Bateman Vice President & Gen. Mgr., Boeing Marine Systems
H. K. Hebelner President, Boeing Aerospace Company
J. Mallen President, Boeing Vertol Company

CC: D. P. Beighle Vice President Contracts & General Counsel
C. E. Skeen Senior Executive Vice President
R. W. Welch President, Boeing Commercial Airplane Company

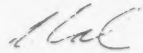
SUBJECT: Spare Parts Acquisition Procedures

As Boeing employees, we have a responsibility to give our Defense Department customers their money's worth, and spare parts procurement is an important part of this effort. We must give high priority at all levels of the Company to practices that will achieve economies in designing and producing the spare parts required to assure readiness in the nation's defense systems. This will include the establishment of procedures to assure that in processing spare parts orders we will advise DoD of appropriate and available alternatives that would be likely to result in significantly lower prices. These would include such methods as quantity purchases, competitive procurement, substitute parts that meet applicable military specifications, or DoD making the part itself, etc.

If the buying agency still wants the order to be filled as placed, or if emergency requirements preclude any consideration of alternatives, we will accept the order and exert diligent efforts to perform it efficiently and economically.

To promote awareness and vigorous support of this policy we should find appropriate ways to incentivise and reward all employees who make contributions in this area. Employees eligible for the company Suggestion Program should understand that they individually can earn up to \$10,000 through existing company award procedures, by developing better and cheaper ways of producing spare parts for the Government and they should be encouraged to identify any instance of spares costs or prices that are out of line.

The Boeing Company's objective is to supply cost-effective systems. We must strive to eliminate waste at every level to assure that the Government gets the greatest benefit for every dollar. An efficient and economic DoD spare parts acquisition process is necessary for defense, beneficial to the public and good business for Boeing.



M. T. Stamper

ATTACHMENT F

BOEING AEROSPACE COMPANY COST SAVINGS

9-21-83

SUGGESTION SYSTEM PERFORMANCE

	<u>1982</u>	<u>1983 To Date</u>
Suggestions Received	6,983	4,201
Suggestions Adopted	2,433	1,652
Awards Authorized \$	\$560,179	\$440,679
Cost Savings \$	\$11,846,561	\$9,558,337

- * The following Suggestion Awards are representative of the types of Suggestions received and the employees desire to reduce costs:

MARK KAMPBELL (Hourly)	\$5,000 Award	\$435,170 Savings
PAUL KRUSE (Hourly)	\$5,000 Award	

ALCM PROGRAM

The mechanics suggested replacing existing lubricating grease with a MIL-STD corrosion preventative compound, thus eliminating replacement of all corroded external fasteners. A savings of over 6,000 manhours and \$355,000 in material costs resulted.

WILLIAM MOORE (Hourly)	\$2,640 Award	\$ 26,400 Savings
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E3A PROGRAM

The expiditer discovered a part number declared surplus. The part was a Westinghouse Kit consisting of 6 circuit boards. The suggestion was to use the surplus part to fill a DDT&E Spares requirement.

JOHN FENCHEL (Hourly)	\$10,000 Award	\$114,794 Savings
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747, E4 PROGRAMS

This shop mechanic's idea for shop aids and numerical control tapes eliminated the need for 7 different tooling fixtures, reduced costly flow time, machine set-ups and greatly reduced the scrap rate of parts.

IVAN LAWVER (Prof/Admin)	\$10,000 Award	\$221,100 Savings
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ALCM PROGRAM

The suggestion reduced the time required to conduct the helium leak test on valves installed in the ALCM fuel tanks by redefinition of engineering requirements.

STEVEN BOOY (Hourly)	\$5,000 Award	\$115,120 Savings
DONALD SHEARER (Hourly)	\$5,000 Award	

E3A, ALCM, ROLAND, E4, E6, IUS, ASAT PROGRAMS

These shop employees computerized a manual method of projecting microelectronic statistical data which resulted in improved accuracy, flow time, schedule adjustments and material requirements for all microelectronic production control tasks.

NORBERT KAUP (Gen. Off.-Technical)	\$10,000 Award	\$138,371 Savings
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ALCM, ROLAND, E3, E4, IUS PROGRAMS

The suggester eliminated manhours required to prepare and track numerical control tape tryout work orders by issuing a "Standard Shop Order" to cover all part numbers.

HECTOR GILLIS (Hourly) \$10,000 Award \$300,354 Savings

E3A PROGRAM

This suggestion allowed the Flight Test crew to change the Surveillance Radar Functional Group Digital Data Processor configuration in-flight; thus eliminating the need to land, reconfigure on the ground, refuel and fly again. At least 3 such flights were eliminated at \$100,000 per flight.

PATRICIA EARLES (Gen. Off.-Technical) \$8,000 Award \$118,136 Savings
THAIS HATFIELD (Gen. Off.-Technical) \$2,000 Award

E3, ALCM, ROLAND, E4, E6, IUS, ASAT PROGRAMS

The originator of the idea sought help from another employee. The idea eliminated 14 of the 17 copies of microfilmed tool drawing (56,388 per year) being sent to various divisions of the Company. In addition to the noted savings, we expect to save \$260,000 in other Company Divisions - Auburn, Everett, Renton, Portland, Wichita and Vertol.

- Suggestions are also submitted that are incorporated but employee awards are not granted due to ineligibility. An example is:

ROBERT WHEELDON (Engineer) -0- Award \$851,635 Savings

E3A PROGRAM

Suggester redesigned a KY-806/A circuit card to upgrade design and lower power requirements. The suggestion resulted in VECP-830. The suggester's job description covers such tasks. Line of Duty Certificate issued.

- For the Fiscal Year 1982, the Boeing Aerospace Company submitted 11 Value Engineering Change Proposals for a projected savings to the Air Force of \$37.9 million.

The following two awards are examples of this activity:

WILLIAM J. GUTHRIE (Engineer) \$558.54 Award \$723,500 Program Savings

ALCM PROGRAM

Eliminated grey enamel finish on electronic housing/electrical items.

GEORGE R. SCHMIDT (Engineer) \$624.35 Award \$1,104,000 Program Savings

ALCM PROGRAM

Reduced number of exterior markings on air vehicles and training missiles.

- In addition to the above, an example of performance on contracts is the E-4 Program. BAC risked \$2.9 million to fabricate three sets of Boeing built hardware for the E-4B modification program. This resulted in a savings of \$287,000 on modification of aircraft No. 1. Sixty-five percent of the savings accrues to the Air Force.
- Within the Company's cost savings activity is a Cost Improvement Program which also recognizes employees. Examples noted below demonstrate the effort on both the employee and the Company's part to control costs.

NORMAN BRANYAN (Prof. & Admin.)

Norm was recognized for bringing to management's attention that Spares pricing for a self-locking nut at a unit price of \$2.00 each would be sold to the Government at \$112.00.

BILL REGAN (Prof. & Admin.)

Bill received recognition for his conscientious effort to inform management of situations in Spares pricing that are not consistent with good pricing judgment. He noted an NAS screw with a C-Bar unit price of \$.43 each would have been sold to the Government for \$250.00 as a result of the vendor lot change.

LEWIS WINDER (General Office)

This employee recognized a Spares pricing situation that was also not consistent with good pricing judgment. It involved an order for 100 feet of BMS wire with a unit price of \$.225/ft that would have been sold to the Government for \$1,125.00 or \$11.25/ft.

For your information, The Boeing Company Suggestion System Performance for 1982 is shown below:

	<u>1982</u>
Suggestions Received	51,481
Suggestions Adopted	18,724
Awards Authorized \$	\$4,380,984
Cost Savings \$	\$55,810,074

TITLE	SAVINGS	CONTRACT #	AWARD	DESCRIPTION
Replacing Reinforce- ment Angles in Struts of JT3D Aircraft	\$67,063.00	F34601-82-C-2394 F34601-83-C-0540 Type: KC135 re-engine JT3D	\$6,707.00	Prior to this suggestion both rein- forcement angles were removed and replaced. As a result of this suggestion those areas that are corrosion damaged on the aft section are now repaired instead of being replaced.
Reduce Subcontractor (BMAC) Maintenance Cost for \$ 227,487.94 (AIR FORCE) Mission Data Preparation \$6,270,102.00 System (MDPS)		F33657-79-C-0416 Type: Cruise Missile Integration	\$5,000.00	BMAC received Advance Change Study Notice 3050 requesting 24 hour not-to- exceed down time for maintenance on MDPS II Systems. This increased the maintenance cost from our vendor's standard agreement and also resulted in some idle time. As a result of this suggestion this requirement was modified to allow the contractor to provide 24 hour a day on-call maintenanc service with a 4 - 8 hour on-site response and a continuous effort until the MDPS System is operational.

TITLE	SAVINGS	CONTRACT #	AWARD	DESCRIPTION
Use of Monel Steel Rivets	\$48,723.47	F34601-83-C-0540 KC135 re-engine JT3D	\$4,873.00	Prior to this suggestion the engine cowls of the JT3D aircraft were fastened with bolts. As a result of this suggestion the left hand cowls are now fastened with monel rivets resulting in a time and material savings.
Certification of Electrical Crimping Tools	\$38,426.30	N00019-81-C-0139 Navy & Air Force Automated Test Systems	\$3,843.00	Prior to this suggestion all electrical crimping tools requiring calibration/certification were sent out to a local calibration service. As a result of this suggestion a tensile test stand and equipment was purchased so these tools could be certified in house.
Rerouting of Fuel Pressure Switch Control Wire Bundle	\$36,526.12	F34601-82-C-3726 Type: KC-135; ECP 405	\$3,653.00	Prior to the suggestion the wire assembly had to be removed from the aircraft, disassembled, then reassembled with new wire and installed. As a result of the suggestion the drawing was revised to reroute the wire assembly leaving the old wire in place.

BOEING MILITARY AIRPLANE COMPANY
SUGGESTION SYSTEM
1982 - 1983
SUMMARY STATISTICS

	<u>1982</u>	<u>1983</u> (as of 9/16/83)
Suggestions Received	3,015	2854
Suggestions Completed	3,292	2599
Suggestions Adopted	915	596
Adoption Rate	27.8%	22.9%
Total Savings	\$7,329,375	\$4,480,101
Total Awards	\$ 309,271	\$ 155,796
Ratio Awards to Savings	1:23.7	1:28.8



RECEIVED
AUG 22 1963

DEPARTMENT OF THE ARMY
US ARMY PLANT REPRESENTATIVE OFFICE, BOEING VERTOL COMPANY
3402 14TH ST, PHILADELPHIA, PA 19142

J. MALLON
PRESIDENT

16 August 1963

DAVSV-P

SUBJECT: Letter of Appreciation

Col J. R. BRIER
16 AUG 83

THRU:

Commander
US Army Plant Representative Office, Boeing Vertol Co.

Mr. George W. Windolph
Director of Product Support, Boeing Vertol Company

TO:

Mr. Daniel McKeown
Spare Parts Order Control, Boeing Vertol Company

RECEIVED

AUG 18 1963

MANAGER
LOGISTICS SUPPORT

1. I would like to take this opportunity to express my appreciation to the Spare Parts Order Control Department, and in particular Mr. Daniel McKeown, for the outstanding support he has provided to this office in the area of spares ordering.
2. You have, on three separate occasions since April 1963, conscientiously helped the Boeing Vertol Company give the American taxpayer a fair return on his investment.
3. With the Defense Department's emphasis on safeguarding spare part costs, you were instrumental in a cost avoidance to the Government in excess of \$30,000.00.
4. Furthermore, your enthusiasm and positive attitude has resulted in an outstanding working relationship between yourself and US Army Plant Representative Office Personnel.
5. A sincere thank you for a job well done.

FOR THE COMMANDER:

WILLIAM S. REHRER
Chief, Procurement and
Production Division

AUG 19 1963

DIRECTOR
HELICOPTER PROGRAMS

CF:

Boeing Vertol Company 8/18

ATTN: Mr. J. K. Hancock, M/S P23-53
Logistics Support

36-141

ATTACHMENT F

ATTACHMENT G

BOEING AEROSPACE COMPANY

P.O. Box 3550
Seattle, Washington 98124

A Division of The Boeing Company

August 22, 1983
2-1100-0000-443

Headquarters Oklahoma City Air Force
Logistics Center (AFLC)
Tinker Air Force Base, Oklahoma 73145

Attention: Elizabeth J. Russell, Deputy Chief
Weapons Systems and Major Equipment Division
Directorate, Contracting and Manufacturing

1. Boeing Aerospace Company has recently conducted a comprehensive review of its existing policies and practices relating to sales to DoD of replenishment spare parts. Problems have been identified and we have initiated several corrective actions, including:

1. Recommendations to procuring agencies that certain parts be broken out for procurement or manufactured by the Air Force.
2. Changed procedures in proposing and/or processing orders with minimum buy material requirements.
3. Higher level management review and approval of spare part quotations.

We hope that these and other steps, together with the forthcoming recommendations of the Air Force Management Analysis Group will correct the shortcomings of the present spares procurement system.

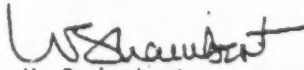
2. Our review also indicated that the problems identified in the recently attempted requisition of AWACS navigator stool end caps was a classic example of the potential result of the imperfections of that system. Attached is a chart indicating the procurement history of this part; two were bought as initial spares in 1977, and three were bought as replenishment spares in 1981. Given the lapse of time between procurements, our pricing was in accordance with existing policy and practices for both initial and replenishment spare parts.

3. Boeing recognizes that it is undesirable for the Air Force to buy and the Company to sell replenishment spare parts on a basis which produces prices totally out of proportion to the apparent value of the items involved. Following our review of the end cap situation, we found that similar items were available from a commercial supplier at a much lower cost. We conducted tests and concluded that they met the applicable military specifications. Boeing has processed an engineering drawing revision which establishes a new number for this acceptable substitute part.

4. Boeing is, therefore, now able to quote for a firm fixed price of \$13.40 for a quantity of forty (40) of the substitute part, Number 132-8N-1187. Since the vendor stipulates a minimum buy of a quantity of 40, we can provide all 40 for this price which results in a unit price of 34¢. We would propose that the two purchased by OC-ALC as initial spares in 1977 and the three purchased by DLA as replenishment spares in 1981 be returned for exchange. We would then provide any quantity up to 40 of the new parts through a replenishment spare part order against our existing OC-ALC Contract F19628-75-C-0162 for U.S. AWACS spares, charging \$13.40 and crediting the total cost of the previous purchases of \$3,136.61 for a net credit of \$3,123.21.

5. If this proposal is acceptable, it is suggested that it be accomplished through the normal procurement channels for the AWACS spares provisioning contract cited above. Any questions should be directed to me at (206) 773-1190.

Sincerely,


W. S. Lambert
Director of Contracts

Attachment

[Questions with answers supplied follow:]

QUESTIONS SUBMITTED BY SENATOR JOHN TOWER, ANSWERS SUPPLIED BY
ARTHUR E. WEGNER

Chairman TOWER. Mr. Wegner, to what extent possible do you feel you can break out subcontracts and what do you estimate the savings to be?

Mr. WEGNER. "Breakout" as defined by the government is any procurement not sole-sourced to the prime contractor. Breakout happens either through a competitive procurement or a directed procurement from a source other than the prime contractor.

A competitive procurement is any purchase awarded to the lowest of two or more bidders, one of which may be the prime contractor. Breakout does not exclude the prime contractor from consideration as a source when there is a competitive procurement.

A 50 percent breakout is a realistic goal for the government. If any real savings are to be achieved, however, the government is going to have to make a substantial initial investment—including increased staffing and updated computer systems—and then be a very effective buyer.

Indeed, unless the government is able to buy directly from other sources for prices 40 to 50 percent less than the prime contractor's price, there will be little real savings.

The prime contractor must furnish support services to the military customer and the cost of these services must be recovered in the price of its hardware. As a result, the prime contractor is financially unable to offer a price which is competitive with a source not obligated to provide such services.

But the government is going to continue to want the services that had been provided by the prime contractor, and will have to pay for them out of the difference between the prime contractor's price and the lower price the government pays elsewhere.

One of these services is the prime contractor's maintenance of the capability to supply such parts in an emergency or expedite situation, a capability which would inevitably be lost if other sources were routinely selected.

If the government breaks out all the "pass-through" parts, at prices 40 to 50 percent below the prime contractor's price, and those parts are in fact neither technically critical nor related to flight safety—it could theoretically achieve a net savings of 10 percent to 20 percent over the long haul.

If, on the other hand, the government breaks out select parts which are technically critical or are related to flight safety, then the story is different.

In that case the government would have not only to increase its staffing and update its computer systems, but it would have to develop the required quality assurance and materials control systems that we provide today, and these are very expensive undertakings.

The result, I believe would be minimal savings. In fact, it is highly likely that the bottom line cost to the government would increase.

Chairman TOWER. Mr. Wegner, would you provide for the record a copy of the subcontracts that you have broken out and those that are under review for such action?

Mr. WEGNER. The government, not the contractor, is responsible for breakout. The contractor can only offer parts as candidates for breakout.

In my testimony, I estimated that we had identified 7,500 part numbers to the government as candidates for breakout. We don't know how many the government has actually broken out.

The following table reflects the company's recommendations to date by engine model.

Engine model:	Candidate breakout parts
F100	2, 125
TF30	2, 866
J60	91
J57	1, 692
J52	208
J75	941
TF33	1, 067
Total	9, 725

Supporting the government's breakout goals is a continuing effort at Pratt & Whitney, and it is the company's plan to identify additional parts as candidates for breakout on a routine basis.

As I indicated in my testimony, we are participating in a joint effort with the Navy in reviewing approximately 2,000 TF30 and J52 candidate parts for breakout.

Chairman TOWER. Mr. Wegner, there seems to be a lot of interest these days, especially on the Hill, for warranties on defense products. In fact, I understand that both contractors have included warranties in their proposals for the alternate fighter engine. It would seem to me that breakout spare parts would have some impact on contractor offered warranties. Would you please comment on what the impact might be?

Mr. WEGNER. Pratt & Whitney has led the industry in offering warranty packages for our products to our military customers. It's our belief that the military services find these warranties beneficial to them in managing their engine programs.

But as far as breakout is concerned, Pratt & Whitney's warranty contracts clearly state that Pratt & Whitney is not responsible for, and has no obligation for the performance, quality, durability or damages resulting from the use of non-Pratt & Whitney-provided spare parts in the engine.

The government should recognize that the majority (nearly all non-prime contractors) of spare parts suppliers give only limited written warranties to the government. Oftentimes these warranties expire even before the parts are installed in an engine.

In addition, warranties from suppliers which are not the prime contractors do not cover secondary engine damage as a result of failure of the parts they supply.

If, for example, the government installs a breakout stator in an F100 engine during the engine warranty period, and the stator fails and severely damages the engine, the stator supplier who produced the part for the government would at best replace the stator. But the government still has a broken \$2-million engine.

If Pratt & Whitney had provided that stator, the company would complete all necessary repairs and return the engine to serviceable condition at no cost to the government. In addition, Pratt & Whitney would perform a failure analysis and recommend corrective action which would prevent the recurrence of the problem.

For this reason, we think the government should consider risk to the engine warranty when performing the economic benefits analysis portion of DAR Supplement No. 6 as it pursues breakout of spare parts.

QUESTIONS SUBMITTED BY SENATOR JOHN TOWER, ANSWERS SUPPLIED BY
BRUCE HAHN

Chairman TOWER. Mr. Hahn, a point that is well made by the major engine manufacturers is that if all or most of the parts of a jet engine were to be broken out for competition there would be inevitable sacrifices in both accountability and liability.

How do you respond to this concern?

How could your members provide the same level of quality assurance and accountability that the government now enjoys when dealing directly with the prime manufacturer?

Mr. HAHN. We disagree. As we pointed out in our testimony, there presently exists a system of accountability and liability that is effective with multiple spare parts vendors. Traceability is achieved in several manners. In some cases, parts may be engraved with a coding identifying the parts manufacturer. Parts not marked in this manner are documented with a system of paperwork which eventually leads to documentation in maintenance logs for every military aircraft.

All suppliers, be they OEMs, their subcontractors, or other companies dealing directly with the government, are responsible for latent defects, even after delivery, under the current standard inspection clause.

Quality assurance results mainly from the application of military specifications (MIL SPECS). Many of our members, even when acting as subcontractors, have

their own quality assurance program as called for by MIL SPECS. In some cases, the quality assurance function may be performed by private laboratories acting as consultants and in other cases it is performed by prime contractors. There is no reason that any company, regardless of size and regardless of whether or not it is the original equipment manufacturer, would be at a disadvantage in adhering to MIL SPECS. And there is no reason that the service branches could not use independent consultants to assure adherence to MIL SPECS, which would have the advantage of bringing additional objectivity to the MIL SPECS process.

Chairman TOWER. Mr. Hahn, one of the difficulties that any spare parts manufacturer faces in trying to win a government contract is that he must first prove he is qualified to produce the particular spare part. According to current regulations one of the ways that he can win this qualification is by obtaining the approval of the engineering source or original equipment manufacturer (OEM) of that particular part. What recommendations have been made by the NTMA to assist its members in obtaining such qualification?

Mr. HAHN. Our position is that requiring a potential competitor to obtain the approval of the original equipment manufacturer in order to bid against him is about as fruitful as sending a chicken to convince a fox that he should go on a vegetarian diet. Our efforts in this regard have been aimed at convincing Congress to eliminate these ridiculous and anticompetitive rules, which incidentally are not mandated by legislation, but result from rules generated within DOD without distribution in draft form in the Federal Register for comment.

On the other hand, we have taken many steps to assist our members in obtaining the very limited amount of work not restricted from open competition by barriers such as these. We have:

(1) Held two "Procurement Fairs" at national meetings in the last two years in order to facilitate marketing efforts between our members and the major procuring activities and the major prime contractors. Among those represented have been all five Air Force procuring activities, the Army Material Readiness Command, the Army Tank Command, the Navy Ship Parts Control Center, and the Navy Aviation Supply.

(2) We have met with senior Administration figures such as former Deputy Secretary Carlucci, Air Force Secretary Verne Orr, Under Secretary Richard DeLauer, other senior appointees, and senior and mid-level staff in the other service branches and DOD. In all cases, we both identified the barriers to competition and offered to work with them to encourage our members' participation.

(3) Our Association publishes a Buyers Guide, a document several inches thick which is distributed to all procuring activities. This publication contains our members' equipment configurations which would enable any sophisticated buyer to identify companies with the equipment required to produce a given part. This document will contain MIL SPECS attained by future editions. This data is also on computer. At our recent visit to Tinker Air Force Base, we expressed our willingness to make this data available to this and other buying activities by use of remote terminal. Despite the fact that those present at Tinker Air Force Base expressed some interest, we have yet to have any follow-up from them.

(4) We are operating under a new Department of Commerce grant which will enable us to help members qualify for MIL SPECS.

All these efforts are being made in order to prepare members for the work which we expect to become available once Congress acts to remove barriers to competition. Right now there is not a shortage of suppliers. There are plenty of companies who can make the parts to any level of quality assurance you desire. What needs to be done is to remove artificial barriers to competition so that more than 10 percent of these parts can be obtained competitively. When DOD tells you that there are not enough "qualified" suppliers, they are telling you that there are not enough companies who can somehow convince OEMs to act against their own self interest, that there are not enough companies who can make parts from non-existent or illegible blueprints, and not enough companies who can jump through restrictive and irrelevant hurdles erected by DOD.

Chairman TOWER. Mr. Hahn, it has been suggested that one of the reasons that why more small manufactures are not competing directly for government contracts is that dealing with Federal regulations is overly complex and cumbersome. It is an aggravation that many would rather avoid, even if it means losing a contract. What actions has the NTMA taken to assist their membership in doing business with the Federal Government?

Mr. HAHN. The problem is not just overly complex and cumbersome regulations. The steps we have taken in that regard are those described in our previous response.

The problem is that many of the regulations are not complex and cumbersome, they are restrictive. Virtually no amount of paperwork will help a company get work if the part the company wants to build is procured sole source because (1) a bureaucrat has decided it would cost more to obtain competitively and thus is not accepting bids, or (2) he has decided not to obtain a competitive bid because he agrees with the OEM's recommendation that nobody else has the skill to make the part.

The solution is not just a question of simplifying forms which are overly complex and cumbersome. We need the help of this committee to break down artificial barriers to competition which are unrelated to quality assurance, documentation, or any other legitimate purpose of the procurement system.

QUESTION SUBMITTED BY STROM THURMOND, ANSWER SUPPLIED BY
DONALD H. WHITE

Senator THURMOND. Mr. White, what sort of savings can Hughes Aircraft Company realize by breakout of subcontracts?

Mr. WHITE. By the question, I assume you mean the savings to the Government which might be realized by spares breakout on Hughes programs. The answer is, broadly speaking, not very much in percentage terms—perhaps 10 to 20 percent of material costs—but the aggregate amount across all defense programs might be substantial. The policy we have adopted calls for charging the material strictly at purchased cost, plus only those administrative charges to cover our cost of procurement and other necessary support. Assuming that the Government would need to spend an equivalent cost for procurement and support if it did the purchasing, then the only difference would be the nominal Hughes profit added for the transaction.

This answer also assumes that either party—the Government or Hughes—is able to buy in economic quantities; if that were not the case, then the advantage would be heavily in favor of the party which could buy in economic quantity.

QUESTION SUBMITTED BY SENATOR JEFF BINGAMAN, ANSWER SUPPLIED BY
ARTHUR E. WEGNER

Senator BINGAMAN. Mr. Wegner, you stated that your company had identified more than 7,500 parts for breakout in the past two years, and that you feel that prime contractors have a responsibility to assist government procurement agencies to breakout more spare parts. You also stated that the Department of Defense was having trouble finding the technical data package for many of the spare parts your company had identified for breakout. Presumably, Pratt & Whitney has these data packages in its possession. Would you be willing to help the DOD by supplying substitute data packages for a nominal fee which would only cover the duplicating costs?

Mr. WEGNER. Pratt & Whitney is willing to support its military customers in developing reprocurement data packages to the government's specifications under normal contracting arrangements.

The reprocurement data packages which the government has, however, are creatures of contract definition. The packages furnished under earlier contracts—while they conformed to contract requirements—are less inclusive than current government standards require.

Pratt & Whitney has not kept the old contract data packages current for they are not useful or used in our manufacturing operations. Similarly, our in-house documentation is unique to our facilities and processes—and would be of little value to another producer.

Any arrangements with the government to supplement reprocurement data packages would necessarily involve significant costs to update the data packages to current government standards.

QUESTION SUBMITTED BY SENATOR JEFF BINGAMAN, ANSWER SUPPLIED BY
DONALD H. WHITE

Senator BINGAMAN. Mr. White, would Hughes Aircraft Company similarly be willing to supply substitute technical data packages for breakout spare parts for a nominal fee?

Mr. WHITE. Yes, in fact, as I said in my testimony, we will actively support the breakout of parts we procure from suppliers, which we refer to as "pass through" or "vendor direct" items. We do raise a caution signal about some unique articles which are critical to systems performance, where overall product integrity might be jeopardized.

Senator THURMOND. We will stand adjourned.

[Whereupon, at 1 p.m., the committee adjourned, subject to the call of the Chair.]

